THE COTTON GIN AND OIL MILL

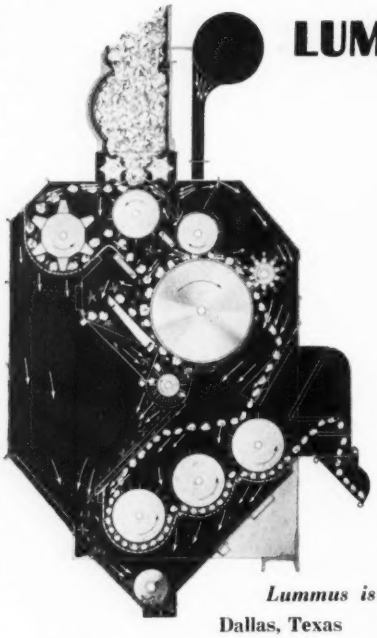
PRESS

FORMERLY THE COTTON AND COTTON OIL PRESS

APRIL 26, 1952

53rd YEAR

THE MAGAZINE OF THE COTTON GINNING AND OILSEED PROCESSING INDUSTRIES



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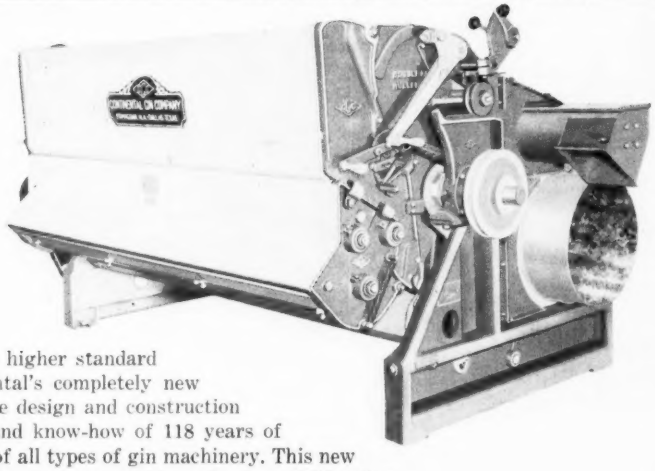

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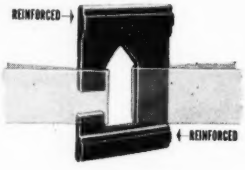

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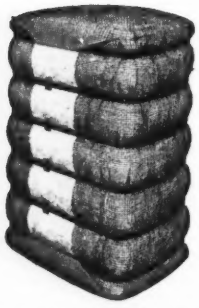

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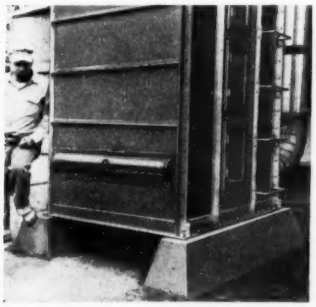

This is a simple installation on new Driers or on existing equipment. It becomes a part of the side of the Drier. Hinges permit the unit to swing down for easy tramp iron removal. To make installation even more simple, the magnet may be installed in the transition piece following the Drier. These installation points provide greatest protection from fires, and also protect cleaning equipment from damage.

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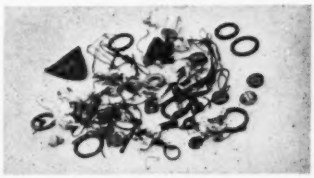

Shown above is a typical collection of tramp metal removed from one of Eriez experimental gin installations following a short period of operation. By use of Eriez magnetic equipment this foreign metal, which might strike sparks in the presence of combustible fibres causing fires and explosions, is eliminated. In addition, mechanical damage to equipment is minimized, maintenance problems reduced and greater safety attained.

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SWIFT & COMPANY

THE COTTON GIN AND OIL MILL PRESS

53rd YEAR

THE MAGAZINE OF THE COTTON GINNING [illegible]

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The Cover

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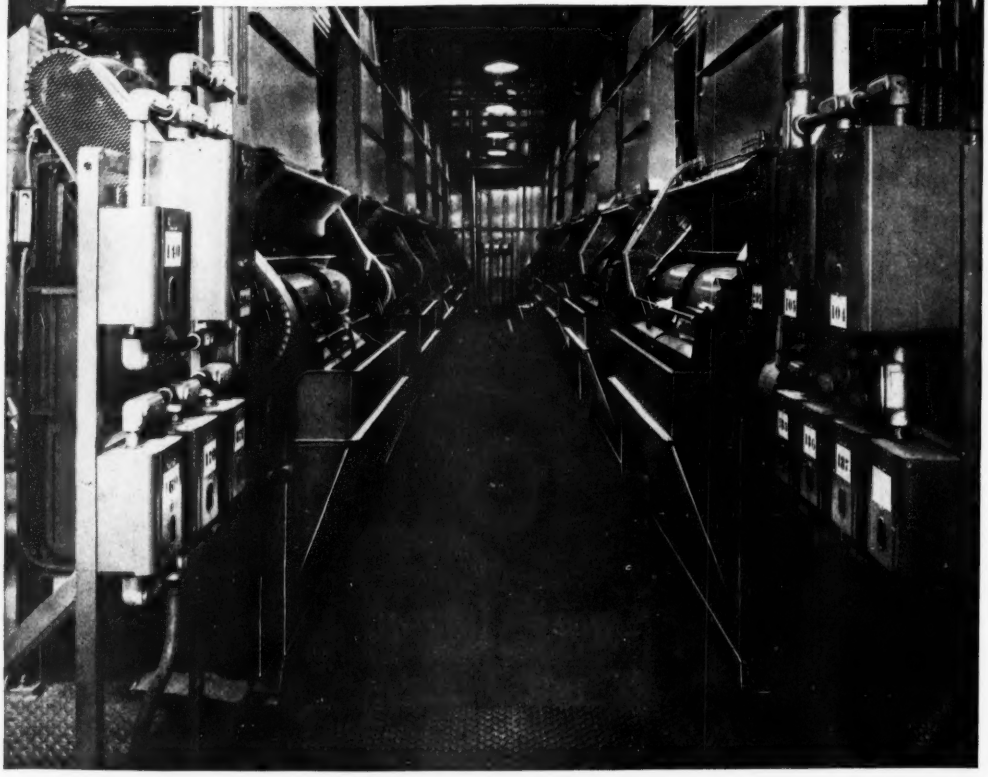

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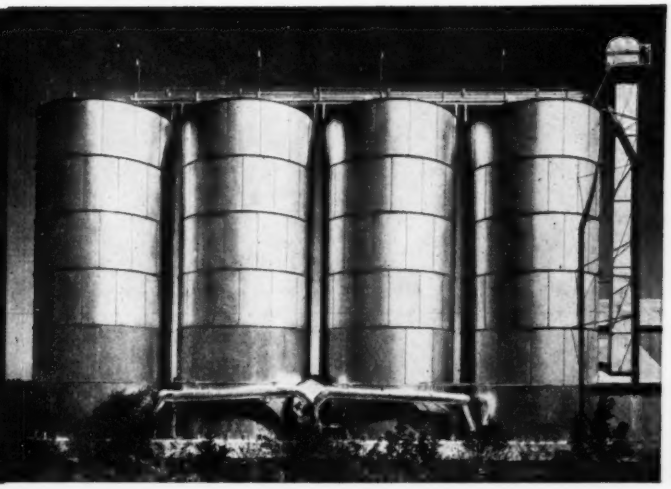

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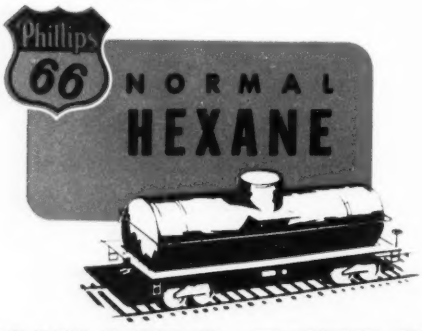

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The Inter-Industry Ginning-Spinning Tests

By Dr. C. R. SAYRE

DR. C. R. SAYRE is chairman, Industry-Wide Cotton Quality Committee; chairman, National Cotton Council's Production and Marketing Committee; and president, Delta & Pine Land Company, Scott, Miss.

PROVIDING SPINNERS with desired qualities of lint and farmers with grades which maximize dollar returns is the primary function of cotton ginners.

Millions of dollars have been spent by gin owners for additional drying and cleaning equipment designed to turn out better grades and to meet the problems accompanying changes in cotton harvesting conditions and machinery. As cotton harvested and ginned with new equipment and new practices went through the mills, serious questions were raised concerning the effects of these new developments upon spinning performance and qualities of end products.

That is the cotton-industry problem which prompted a series of industry-wide ginning-spinning tests which recently have been completed.

These studies were developed and guided by the Industry-Wide Committee on Cotton Quality, a group of leaders representing all parts of the raw cotton industry. A large number of ginners, gin machinery manufacturers, cotton mills, farmers and technical workers cooperated freely to make the mill-scale trials possible.

Four hundred and twenty-five bales of cotton were processed under varying conditions in these tests. The report includes a review of procedure and detailed supporting data for each stage of ginning, spinning, weaving, dyeing, and testing.

The results of more than a year and one-half of diligent efforts are now available in the National Cotton Council report entitled "Cotton Fiber Properties, Spinning Efficiency and Fabric Quality as Affected by Ginning Practices."

Seed cotton was obtained from hand- and machine-harvested lots with the usual farm and gin operating conditions left unaltered except as required for different parts of the tests. At each of 6 gins, seed cotton for 25 bales was mixed carefully so that all bales in a series would start out on an equal basis. Each series of 25 bales was divided into lots of 5 bales each, with one 5-bale lot for each of the following practices: (1) "normal" ginning, or ginning according to regular commercial practice; (2) same as in (1) but ginning as fast as possible with a tight seed roll; (3) same as in (1) but by-passing as much of the overhead cleaning as the gin layout would permit; (4) same as in (1) but by-passing the lint cleaners; (5) same as in (1) but using as high drying temperatures as possible.

In all, 3 gins in Mississippi and 3 in California each ginned 3 series of 25 bales (with the exception of one gin which handled only 2 series). This totaled 17 series. The gins represented 3 gin machinery manufacturers who made the 3 main types of lint cleaners in use of 1950. Only one series of cotton was sent to any one individual mill. In this manner one mill could compare the 5 different practices at one gin. Both hand-picked and machine-picked cottons were represented in this test.

Mill measurements of more general interest were: (1) neps, trash, and naps in raw cotton; (2) yarn strength; (3) yarn appearance; (4) neps in gray cloth; (5) neps in dyed cloth; (6) ends down during spinning; (7) strength of cloth; (8) percentage of mill wastes.

Although each mill made its own test, at each step all key samples were tested at the same level of precision. Samples from all 17 mills were sent to one laboratory for comparable testing, thereby determining at a central laboratory: neps, yarn strength, yarn appearance, neps in cloth, and cloth strength.

In addition to the uniform measurement of all mill samples, each lot of raw cotton was spun on a small sample basis in duplicate at the United States Department of Agriculture Spinning Laboratory, Clemson College. Separate tests were made at the Pepperell Company for neps. Approximations of fiber properties were made at 4 cooperating laboratories.

The above described approach made it possible to use a wide range of cottons, ginning conditions, and mill practices while at the same time the tests were conducted on a commercial scale. Large samples were used to obtain reliable ginning and spinning efficiency data. Close supervision was exercised and accurate records kept in all steps in the experiment.

What happened to the lint during ginning is revealed graphically in Figure 1. The findings show that: (1) to omit overhead cleaning will increase moisture and lower grade; (2) to by-pass lint cleaners will lower grade when overhead cleaning still is operating (3) drying at high temperatures improves grade and dries the cotton to the lowest moisture seen in these tests. These are results in which the farmer and ginner are directly interested.

Laboratory studies were in general agreement that ginning variations did not adversely affect fiber properties. "Maturity and fineness would not be expected to change," the bulletin relates, "whereas, strength, and particularly length, conceivably could be affected. A loss in staple length and decreased strength have often been associated with excessive drying when compared with samples ginned under optimum conditions, but those effects were not observed in these tests."

It is emphasized throughout the report that the principal purpose of the study was to discover the effects of the several ginning conditions on: (1) mill waste, (2) yarn and fabric strengths, (3) yarn and fabric appearance, (4) neps, and (5) ends down.

• **Mill Waste** — The ginning conditions

A FREE COPY of the complete report, "Cotton Fiber Properties, Spinning Efficiency and Fabric Quality as Affected by Ginning Practices," may be obtained from the Production and Marketing Division, National Cotton Council, P. O. Box 18, Memphis 1, Tenn.

that produced the lowest grades gave the most mill waste.

• **Yarn and Fabric Strengths**—The effects of the ginning conditions upon yarn and fabric strengths are reported, "Variations in yarn and fabric strengths were small but reasonably consistent. Cottons which were over-dried produced both yarns and fabrics of slightly lower strength than the others, but those differences were small.

"Yarn strength is generally correlated with fiber strength, i.e., strong fibers usually produce strong yarns. Fiber strengths did not change with variations in ginning; however, there was a trend for the yarn and fabric strengths to be lower for the samples dried at the highest temperatures."

• **Yarn and Fabric Appearance**—Appearance of both yarns and fabrics has much to do with their selling prices; consequently, the matter of appearance was judged in several different ways. An important part of the findings on this phase of the work was expressed in the report as follows:

"Yarn appearance is often associated with the number of neps in the card web. In spite of the fact that ginning variations show a significant increase in neps in card webs and a difference in classers' grade, there was little effect on yarn appearance except in the mill-spun, USDA-tested 40's filling yarn. When the fabrics from these same yarns were dyed, however, the samples dried at the highest temperatures showed more neps than others."

Other judgments of fabric appearance

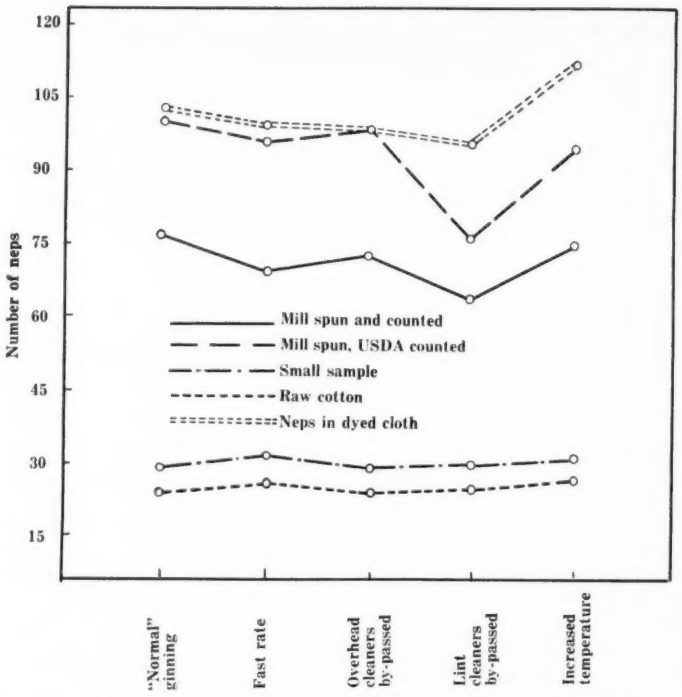

Figure 2. Neps in 100 square inches of card web as determined for raw cotton, in card webs in commercial and small sample spinning, and in dyed cloth, as related to variations in ginning.

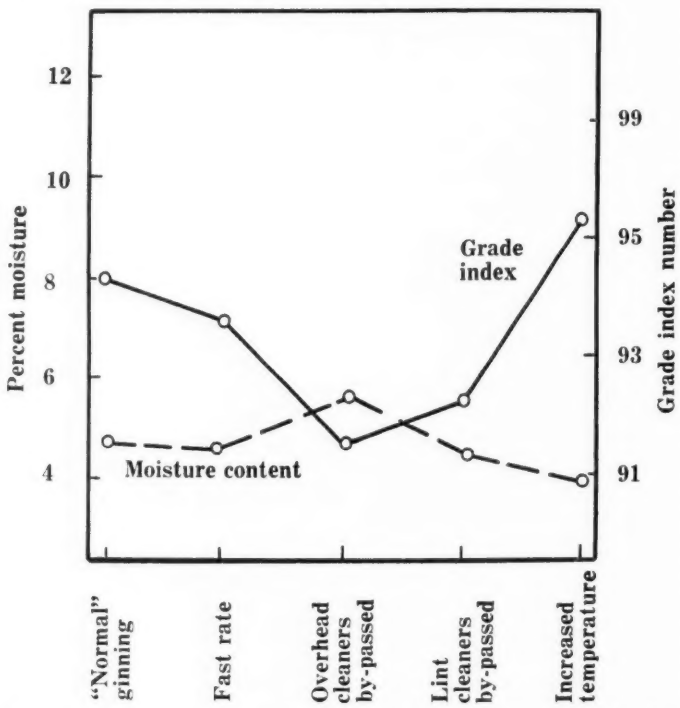

Figure 1. Moisture content and grade index number of lint cotton as related to variations in ginning.

more or less confirmed the above findings, with some further but not clearly defined indications that hand-picked cottons made fabrics of superior appearance compared to those made of machine-picked cotton, and that fabrics made of samples that by-passed lint cleaners often were a little better appearing fabrics than those from lint cleaned samples.

• **Neps**—Regarding neps in card webs and ends down during spinning on a commercial basis, the story is more clean-cut. The picture of what happened is shown in Figures 2 and 3. Under practical mill conditions, by-passing lint cleaners reduced the numbers of neps and it also reduced the ends down. Each of these factors is of economic importance to the mills. Combined they can be very noticeable in mill operations. The data showed: "The number of neps in the card web made directly from the raw cotton, the small samples, and the mill-spun cotton was lowest when the lint cleaners were by-passed. In the mill-scale tests, by-passing lint cleaners considerably reduced the number of neps in the card web."

The ginner will recognize that the 2 lower curves in Figure 2 were made under laboratory test conditions. The upper curves show what happens to the same cotton under commercial conditions. The commercial spinner has to work under volume conditions. He cannot "baby" the cotton. Therefore, the upper curves show the importance of

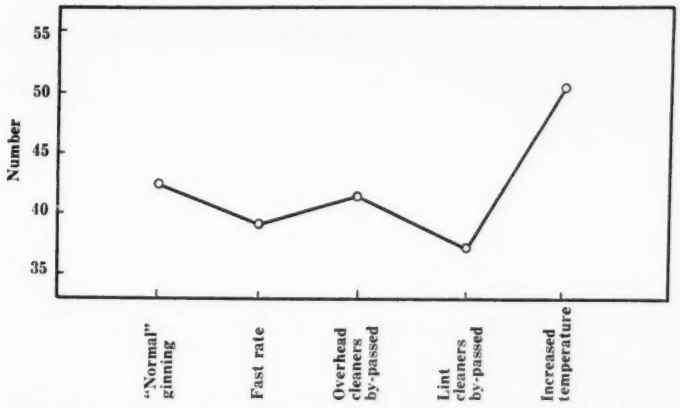

Figure 3. Number of ends down per thousand spindle hours in spinning, as related to variations in ginning.

providing the spinner with a quality lint with the least possible tendency to nep.

• **Ends Down** — Another finding was: "Ends down, which is the number of breaks in the yarn per thousand spindle hours, is another important economic factor in the cost of spinning cotton. The tendency for over-dried cotton, in this study, to cause more ends down verified the belief of some spinners that 'brittleness' of fiber and low spinning output are associated with over-drying. Although the treatments showed somewhat inconsistent differences, the lowest number of ends down was recorded for the samples that by-passed the lint cleaners and the highest number in the samples dried at increased temperatures."

From a farmer's and ginner's viewpoint certain conclusions of both immediate and long-term value can be drawn from these experiments. Although the report does not claim to be the final and undisputed solution to all problems relating to the effects of ginning on spinning efficiency and product, certain lines of action are strongly suggested. These might be summarized as follows:

1. Any handling of cotton at any stage in its processing increases possibility of nepping. Ginners, therefore, can aid in improving cotton quality by cleaning with the least machinery and in the gentlest manner possible. That means by-pass machines that do not really improve grades. Suit the cleaning operation to the cleanliness of the seed cotton being ginned. Keep overflow to a minimum. If possible, route any overflow directly back to gin stands.

2. Driers are valuable aids when they are operated properly. It is true that a drier run at a high temperature will improve grades but the detectable damage will mean poor spinning performance. Dry according to the necessity for drying—not according to a single setting for all loads of seed cotton.

3. It is impractical to advocate control of overflow and drying temperatures when means at hand for such control are only partially successful. The ginner, however, can help solve the control problem by: (1) using his best judgment in all ginning operations until practical gin controls are available, and (2) supporting efforts that are being made by engineers, scientists, and others working with instrument makers, gin machinery manufacturers, and ginning experiment stations, to devise means of controlling the amount of machining and drying at gins.

The first measure is an immediate one that the individual ginner can carry out with his farmer customers. The second job is a long-term effort the ginner can accomplish by cooperation with other ginners and public and private organizations associated with the ginning industry.

4. In the long run the ginner will help himself and his farmer customers by learning all he can about the fiber requirements of spinners. Such cooperative accomplishments as the ginning-spinning tests covered in this report are a good means for exchanging information on mutual problems. The spinner has problems in competition that tie right back to the quality of cotton he uses. Finding ways to obtain the proper quality of lint for the spinners helps solve cotton's problems.

5. The report mentioned another field where study is required to make it possible for farmers and ginners to produce a quality product. It noted that in the market where fiber is evaluated, "The ideal perhaps would be marketing system or practice which would reflect variety values and high quality ginning in the price which the grower obtains for his cotton." All segments of the raw cotton industry can work together toward marketing methods that determine the true value of all cottons.

Beneficial Insect Research Furthered by New Division

Establishment of a Division of Bee Culture and Biological Control in the Bureau of Entomology and Plant Quarantine has been announced. This unit is also responsible for research relating to biological control of insect pests and weeds, including diseases of insects.

James I. Hambleton, for 30 years head of the Division of Bee Culture, will head the Division. Studies of bee diseases and their prevention, and research into the best methods of bee management, have placed bee-keeping on a commercial basis.

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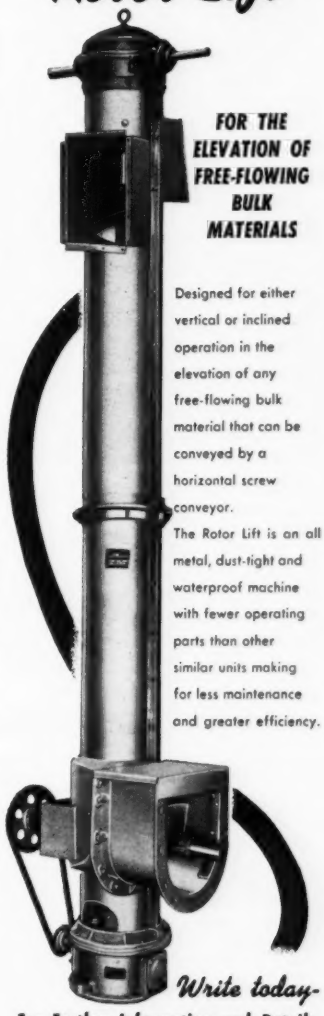

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Figure 1. Microscopical view of infant cotton fibers on a very young seed. Magnification exceeding 1000X.

This Thing Called Cotton

■ Exactly what IS this thing called cotton? Microscopical studies at Southern Regional Research Laboratory show its complex structure.

By MARY L. ROLLINS

Southern Regional Research Laboratory[1]
New Orleans, Louisiana

HAVE YOU EVER really looked at a cotton fiber? How clear an idea do you have of its appearance and structure?

We are accustomed to think of cotton as one of the oldest raw materials known to man; as the best of the natural fibers; as the source of livelihood for thousands of persons in agriculture and industry; as millions of bales moving from gins to cotton mills; as almost limitless yardages of yarn and cloth for clothes, household goods, tentage; as a first-aid necessity. But how many of us have any real knowledge of the fiber itself? Of the huge number of individual fibers—up to 20,000—that grow on only one seed? It is hard to realize that one boll may contain as many as half a million fibers and that one pound of cotton could consist of all the fiber from approximately 600 bolls.

Though cotton has been used as a textile material since the dawn of recorded history, surprisingly little is yet known about the properties of the fiber or of how they might be changed to our advantage. With the aid of the microscope and other laboratory tools, much has been learned in recent years of the physical and chemical nature of cotton fibers. Scientists are gradually building up knowledge of fiber properties and relating these properties to the andvantages and limitations of cotton in its various end uses. Such knowledge will help cotton to hold its own against the growing competition of new synthetic materials, the increasing number of man-made fibers.

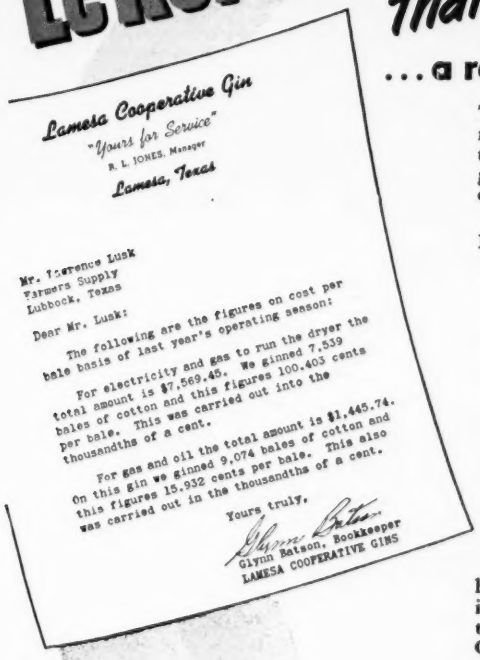
The importance of the microscope as a tool in such studies is well illustrated by its contribution to our present concept of the cotton fiber as an engineering material. Let us consider what is known to date.

• **The Growing Fiber** — Cotton belongs botanically to the Mallow family which you may know better as the family of okra, hollyhock, and hibiscus. The kapok tree and the balsa wood trees are distant cousins of cotton. The cotton fiber itself is a seed hair, a single-celled botanical entity which grows from the epidermis of the seed. Seed hairs of one type or another are common throughout

[1] One of the laboratories of the Bureau of Agricultural and Industrial Chemistry, Agricultural Research Administration, U.S. Department of Agriculture.

Le Roi L-3460 saves more than 84¢ per bale

. . . a report from Lamesa, Texas Gin



Lamesa Cooperative Gin
"Yours for Service"
R. L. JONES, Manager
Lamesa, Texas

Mr. Lawrence Lusk
Farmers Supply
Lubbock, Texas

Dear Mr. Lusk:

The following are the figures on cost per bale basis of last year's operating season:

For electricity and gas to run the dryer the total amount is $7,569.45. We ginned 7,539 bales of cotton and this figures 100.403 cents per bale. This was carried out into the thousandths of a cent.

For gas and oil the total amount is $1,445.74. On this gin we ginned 9,074 bales of cotton and this figures 15.932 cents per bale. This also was carried out in the thousandths of a cent.

Yours truly,

Glynn Batson

Glynn Batson, Bookkeeper
LAMESA COOPERATIVE GINS

This letter from Mr. Batson is proof of the big savings you make, when you use economical Le Roi engines. Savings that arise from operation on low-cost, clean-burning natural gas, butane, or propane — savings in the form of lower fuel, oil, and maintenance costs.

Here are a few other reasons why you can count on the L-3460 to give you low-cost power:

- ✔ **You get 450 hp,** for continuous duty — enough to handle all the equipment in a modern gin installation — plus plenty of reserve power when you need it.
- ✔ **The L-3460 is easily installed** — requires less floor space than engines of similar horsepower.
- ✔ **Operates at the constant speed** necessary for uniform, high-quality cotton. Semi-hydraulic governor insures quick response to load changes.
- ✔ **Maintenance costs are low too.** Sturdy, one-piece crankcase and cylinder construction, the use of oil filters and oil coolers, replaceable cylinder sleeves, simple cooling system and carburetion — all these and many other features give you dependable performance.

Besides the L-3460, Le Roi has 5 sizes of engines from 40 hp. up. All have proven themselves in Cotton Industry service — for low-cost, dependable operation. Your Le Roi distributor can show you a money-saving Le Roi installation. Call on him and see for yourself why Le Roi engines produce power at the lowest cost per bale.

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Carson Machine & Supply Co., Oklahoma City, Okla. • Southern Engine & Pump Company, Houston, San Antonio, Kilgore, Dallas, Edinburg, Corpus Christi, Texas, and Lafayette, Houma, La. • Ingersoll Corporation, Shreveport, La., Jackson, Miss. • Tri-State Equipment Co., Little Rock, Ark., Memphis, Tenn. Nortex Engine & Equipment Co., Wichita Falls, Texas • Farmers Supply, Lubbock, Texas

P-38

Figure 2. Growth rings in a swollen cross section of a cotton fiber under the microscope. Magnification 1750X. (Swelling accounts for an enlargement of approximately 10X.)

the plant kingdom; familiar kinds are those of dandelion, thistle and milkweed. In cotton, however, the hairs are much longer and occur on the seed in greater numbers.

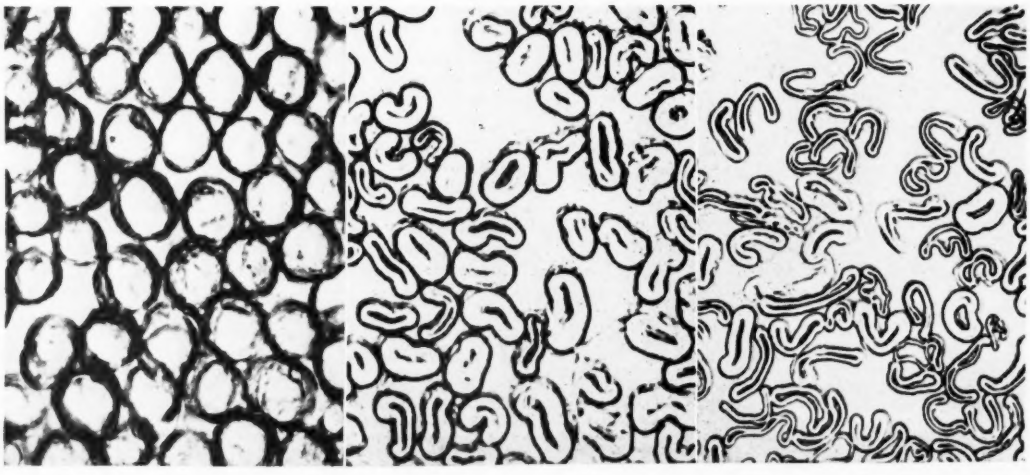
Authorities say that in some varieties the infant fibers spring up on the embryo seed in the very hour of flowering, while in other varieties it is from one to two days later before they can be seen. In any case, within the first week, fibers arise between the epidermal cells of the seed coat, hundreds at a time. New fibers keep crowding in for 3 or 4 or up to 10 days—depending on the type of cotton. In most commercial varieties another crop of short, stubby hairs arises a day or so later as an "undergrowth" beneath the longer fibers. These fuzz fibers we call linters. They are much coarser and shorter than the lint fibers and not suitable for spinning, but find commercial use in the upholstery, rayon, film, and explosives industries.

Once the fiber is out, its growth is phenomenally rapid. It increases in length until sometime between the fifteenth and twentieth day, and a fiber may reach in that time a length more than 4,000 times its diameter. There are fibers of different lengths on the same seed, since they have appeared at different times. During all the while the fiber is elongating it is a tube consisting of one thin cellulose cell wall, or membrane, called the primary wall because it is the first part of the fiber to form. The tube is filled with protoplasm and is plump with the pressure of liquids absorbed from the stem of the plant.

Between the fifteenth and twentieth day the fiber abruptly ceases to grow in length and thickening of the wall sets in. Layer after layer of cellulose is deposited, one inside the other, all within the thin primary wall. This layering was first shown to correspond to the number of days of growth in 1922 by Balls (1), the English botanist, who likened the layers to the growth rings in the stump of a tree, except that the innermost ones are the last ones laid down. Later, Kerr (4), at the Bureau of Plant Industry, Soils, and Agricultural Engineering, confirmed the findings of Balls and showed that each growth ring is made up of two layers, one compact and the other porous—the first associated with periods of growth during daylight and the second during night hours.

The actual diameter of the growing fiber and the degree of cell-wall development are inherited characteristics, but weather and soil environment can also greatly influence the extent of cell-wall thickening. Some fibers die before they receive all the layers of cellulose they should have. Others, retarded in growth because of reduced moisture or food supply, are still under-developed at the end of the growing period because only very thin layers have been deposited. When, after growth ceases, the boll opens, the

Figure 3. Photomicrographs of cross sections of cotton fibers (magnification 500X): Left—Growing fibers filled with plant juices are round in cross section. Center—Thick-walled, well-developed fibers collapse into oval shapes upon drying out. Right—Thin-walled, under-developed fibers collapse into distorted shapes upon drying.



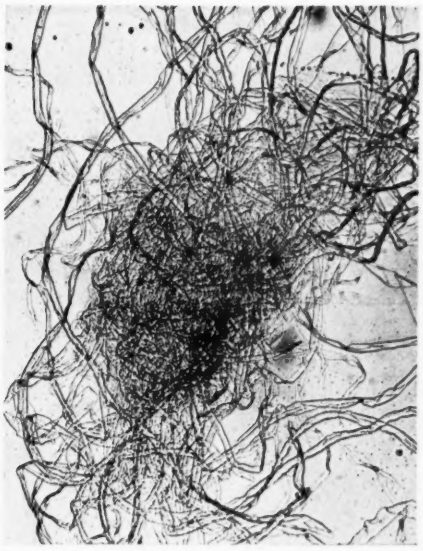


Figure 4. Microscopical view of a single nep, showing a mass of tangled immature fibers. Magnification 70X.

moisture dries out, and the cell, formerly distended with plant juices, collapses into a shrivelled, twisted, flattened tube, which is actually often more ribbon-like than cylindrical.

• **Under the Microscope** — Most of the information we have about the growth processes and morphology of the cotton fiber has been learned under the microscope. By means of this instrument scientific workers have been able through the years to unravel many of the mysteries of the botany of fibers. Two types of microscopes are now in common use: the ordinary light microscope, which has been employed in textile investigations for more than a hundred years, and the electron microscope which is a new invention little more than 10 years old as a tool for textile research. The electron microscope gives views many times the size of the light microscope, but its limitations require that the material to be examined be prepared in the form of an extremely thin sheet of which only a very small area can be covered in each view.

Let us follow the growth of the fibers in a series of photomicrographs. Figure 1 shows infant cotton fibers arising on the coat of a very young seed. The crowded condition of the fibers is apparent. Notice their balloon-like shape. The different lengths of the incipient fibers are revealed also. To obtain this picture, a seed, taken from a boll picked a day or so after the flower opened, was embedded in plastic before it had time to dry out. A thin slice cut to show the epidermal structure was photographed through the microscope. Bundles of cotton fibers can also be cut in cross section by a special technique involving embedding of the fibers in a plastic medium so that they can be sliced with a razor blade. To study the structure of the fiber the section is then swelled in some chemical which will disperse cellulose and an individual fiber or group of fibers may be photographed under the microscope. Such swelling often enlarges the fiber section to about 10 times its normal size, and further magnification with the microscope reveals details brought out by the swelling. Figure 2 is a view of a swollen cross section of a cotton fiber whose stage of growth can be judged by the rings indicating the number of layers of cellulose which have been deposited.

The final development of fibers may be studied through the view given in Figure 3, in which are shown comparative cross sections of bundles of fibers, revealing different states of cell wall development. The fibers vary in shape astonishingly, according to degrees of maturity. The round shape of the very young, growing fibers, fully distended with plant juices, is remarkably definite. Compare with this the oval or "kidney-bean" shape of the normal dried-out, fully-developed, thick-walled fibers. See, in contrast, the contorted and curled sections which result when under-developed, thin-walled fibers dry out and collapse. Their shapes are much flatter than those of the fully matured fibers.

Buyers usually shun thin-walled cotton. The distribution of thin-walled fibers in a sample of cotton has a lot to do with its spinning quality. In the laboratory tests now standard in many mills and marketing agencies, the percentage of thick-walled fibers is expressed as the "maturity count" of the sample. There are always some immature fibers in every sample. In normal commercial cottons about one-fourth of the fibers are not fully developed. Maturity counts as high as 90 percent have been reported occasionally but in commercial upland cottons samples of maturities of 84 percent and above are considered very mature and deserve the term "hard-bodied." Average maturities are considered to lie between 68 and 76 percent, while cottons with maturity counts in the range 60-67 percent are said to be immature (3). These latter often fall under the classer's description of "soft-bodied" or "weak." Below 60 percent in maturity are the "irregular," "weak and wasty" and "perished" cottons; they usually come from drought-stressed or frost-nipped lots. Bolly cotton (2), in which growth was stopped by frost before the bolls were matured enough to open naturally, consists almost entirely of thin-walled fibers.

(Continued on Page 36)

Figure 5. Microscopical view of a single cotton fiber, 1¼ inch base to top, showing variations in size and shape of the dried, shrivelled tube. Magnification 80X.

Based on Latest U. S. Government Figures*

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Men who know sprayers approve COMFORT Sprayer features! Surveys conducted among leading farm experts reveal that COMFORT Sprayers have all the features needed for easy handling, effective spraying, economical operation. Among the 8500 dealers surveyed in 9 leading farm states, those who reported chose COMFORT Sprayers **by more than 2 to 1.** Get the facts! See how you, too, can profit with the sales leader for '52.

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Oklahoma Crushers Meet May 12-13

■ SPEAKERS INCLUDE C. B. Spencer, A. L. Ward, J. H. Brawner, A. L. Durand and Clyde Bowers. To discuss cottonseed processing, cotton production problems, livestock feeding, the pink bollworm and other timely subjects.

LAKE MURRAY LODGE at Ardmore will be the site, for the second successive year, of the anunal convention of the Oklahoma Cottonseed Crushers' Association. Dates are May 12-13.

The business program, as announced by Association Secretary J. D. Fleming of Oklahoma City, has been designed to bring the crushers information of interest and great value.

The convention will open at 10 a.m. May 12 with a meeting of Association directors. The business program begins at 1 p.m. with the annual address of President Amos L. Kobs of Elk City. The first of three speakers to follow Kobs will be C. B. Spencer of Dallas, agricultural director of the Texas Cottonseed Crushers' Association. He will discuss cotton production, with special emphasis on problems peculiar to Oklahoma.

Spencer will be followed by J. H. Brawner, of Western Cottonoil Company, Abilene, Texas, whose talk will be built around the latest developments in the processing of cottonseed. Final first-day speaker will be A. L. Ward of Dallas, director of the National Cottonseed Products Association's Educational Service. Ward, one of the industry's most effective speakers, will discuss developments in livestock feeding.

The Association's annual dinner-dance will be given Monday evening, beginning at 7 o'clock.

The business session on May 13 will open with committee reports and election of officers. Following the election, A. L. Durand, president of the Chickasha Cotton Oil Company, Chickasha, will discuss pure food regulations as applied to cottonseed processing. The newest pink bollworm regulations and the present research program to control the pest will be discussed by Clyde Bowers, entomologist of the Oklahoma state department of agriculture. The convention will adjourn at noon May 13.

W. L. Weber and Associates Sell Oil Mill at Taft, Texas

■ BUYER IS J. W. McKelvey of Harlingen. P. J. Lemm, Jr., is new general manager. Mr. and Mrs. Weber begin tour of Europe in May.

A VETERAN oil mill executive put away the tools of his trade a few days ago and announced that he and his wife will begin a two and a half months tour of Europe in May, "to relax and see a little bit of the world." He is W. LeRoy Weber of Taft, Texas, who until his retirement was vice-president and general manager of the Taft Cotton Oil Company. The mill has been sold by Weber and the Taft Estate to J. W. McKelvey of Harlingen, Texas. Senator Robert A. Taft of Ohio was president of the mill.

McKelvey becomes president of the mill; J. J. Busa vice-president; C. J. Meyer secretary-treasurer; and P. J. Lemm, Jr., general manager. Lemm advises that Jack White will continue as mill superintendent, and says the mill will convert to Anderson Expellers.

Weber's career in the oil mill business began at Terrell in 1914, and covers a period of 38 years of continuous and constructive service to the industry. He was connected with mills at Stephenville, San Antonio and Beeville before going to Taft on March 15, 1921.

LeRoy Weber's record of service to the crushing industry is a notable one. He was a member of the executive committee of the Texas Cottonseed Crushers' Association in 1925-26 and was instrumental in the establishment in that year of the Association's Educational Service, which is now an important part of the National Cottonseed Products Association. Weber was vice-president of the Texas association in 1929-30 and served as president in 1930-31. He again became a member of the executive committee in 1931-32 and also served in that capacity in 1933-34-35-36. He became a director in 1936 when the Association was incorporated and has been on the board continuously since that time. Through special action of the board, Weber will continue as a director until a new election is held. The South Texan also served the Association a number of times as chairman of important committees and as a committee member. In addition to his service to the Texas association, Weber has served the industry on a national scale as a director of the National Cottonseed Products Association.

To Weber goes the credit for introducing flax as a fall crop in South Texas. He produced the first commercial crop in the area at a time when many said it could never be grown there profitably, and crushed the first seed at the Taft mill.

LeRoy Weber was one of his state's most successful oil mill executives. His straightforward manner of dealing with people, his firm convictions, and wide knowledge of crushing problems made him one of the most respected men in the industry.

LeRoy served the industry long and he served it well. He and Mrs. Weber will always have the best wishes of a host of friends in and out of the industry throughout the many happy years that lie ahead. Right now, LeRoy says, he has no future business plans. Countries he and Mrs. Weber will visit on their tour include Ireland, England, Norway, Sweden, Denmark, Holland, Belgium, France, Germany, Switzerland and Italy. A warm bon voyage to LeRoy and Mrs. Weber from the staff of this publication and a safe return home.

Hayes-Sammons Chemical Expands Lab Facilities

The rapid growth of the agricultural industry has caused Hayes-Sammons Chemical Co. of Mission, Texas, to expand its laboratory facilities and hire a full time chemist.

The newly arrived chemist, Harry Holton, is supervising the modernization of a laboratory in Mission, in which he will spend most of his time working with liquid concentrates and dusts.

HARRY HOLTON

Holton, a University of Texas graduate, came from Austin, Texas, where he was with a veterinary pharmaceutical and insecticide firm. A native of upstate New York, he is married and has a ten year old daughter.

New Mexico County Agents Receive Press Reprints

New Mexico county agricultural agents have received copies of an article from The Cotton Gin & Oil Mill Press on feeding mixtures of cottonseed meal and salt.

Ivan Watson, New Mexico extension animal husbandman, secured reprints of the article from the author, A. L. Ward, director of the NCPA Educational Service, so that county agents would have this information on this method of self-feeding cottonseed meal.

As Viewed from

The "PRESS" Box

• Valley Outlook: Gloomy

TANTALIZING TRACES of rain fell in the powder-dry Rio Grande Valley of Texas this week, and there was hope that rains on the Rio Grande watershed might be sufficient to give Valley cotton farmers some water. That hope had faded near the end of the week, however, and the area is still in a critical condition.

A check with Valley sources late this week revealed the following: Permits were issued to plant 942,514 acres of cotton, but it is estimated that only 670,591 acres were planted to the April 15 deadline. Of the planted acreage, 495,398 acres are up, including good, poor and indifferent stands. Of the estimated planted acreage, 444,509 is irrigated and 226,082 is dry land.

A half-inch, or even a three-quarter inch, rain would not help the Valley much, it is said. To do any appreciable good, rains totaling 2 to 3 inches, plus water in the river, are needed in the next two weeks. If they don't come, one guess is that the Valley's cotton acreage for 1952 probably can be figured at around 400,000 acres. The river is dry and the irrigation canals are about empty. Miracles sometimes happen in the Valley, but right now the outlook is gloomy. The same situation exists across the river in the Matamoros area of Mexico.

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This bagging, made of Cuban raw sugar bags thoroughly washed and dried, gives you a better looking and better protected bale.
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• Good Rains Elsewhere

ELSEWHERE IN TEXAS, highly beneficial rains fell late last week and this week. The Gulf Coast has been helped a great deal. In many sections of West Texas, fair to excellent rains fell—in others it is still dry. The northern and eastern parts of the state are in good condition, and in a few isolated spots farmers who are anxious to plant cotton are complaining because the rains haven't stopped.

• Ginners' Schools

THE FOUR cotton ginners' schools to be held in Dallas are a wonderful opportunity for members of the industry to improve the quality of their ginning this year. The first school will be held at The Murray Company of Texas plant in Dallas on April 28-29, the second at the Lummus Cotton Gin Company, Dallas, April 30-May 1, the third at the Cen-Tennial Cotton Gin Company, Dallas, May 5-6, and the last at the Continental Gin Company, Dallas, May 7-8. They are sponsored by the Texas Extension Service, the gin machinery manufacturers at whose plants they will be held, and the Texas Cotton Ginners' Association.

Gin owners and managers are invited to attend, but the man who can benefit the most is the gin operator—the man at the controls in the gin. Ed H. Bush, Extension ginning specialist, College Station, will preside at the schools and explain the purpose in opening remarks. Alfred M. Pendleton, Dallas, USDA cotton ginning specialist, will discuss fire and accident prevention. Representatives of the gin machinery manufacturers will explain the operation of their equipment and give the gin operators practical information that will enable them to do a better job of ginning. To April 24, there were 186 registered for the schools, with others being received daily.

• We're After the "Pinkies"

IF ALL THE GROUPS that were represented at the pink bollworm meeting in Waco on April 11 work together—and there is every reason to think they will—the "pinkies" may have a much harder time this season than last. Educational and enforcement agencies, oil millers, ginners, farmers, bankers, the press and radio and others know what they are up against in checking the spread of this fast-moving pest.

While Texas is making plans to hold it in check and prevent further spread this year, a group headed by Dr. H. G. Johnston of Texas A. & M. is evaluating research and quarantine and control methods and will draw up recommendations on those activities. Cotton Council staff members are making a study of the economic aspects of the pink bollworm problem from the standpoint of cotton production, including production economies by areas, costs and returns, relationship to specific practices, and evaluation of non-cotton zones.

Another group, headed by G. A. Simmons of Lubbock, Texas, a Council director and chairman of the Beltwide Pink Bollworm Control Committee, will analyze added ginning and crushing costs brought about by pink bollworm control in various areas.

The legal aspects of pink bollworm control are being studied by still another group. These include state and federal laws and regulations, their administration and limitations.

The Texas program, reported elsewhere in this issue, fills an immediate need, that is, control during the 1952 season. The technical appraisal to be made will provide ammunition for the 1953 fight, and the expanded research effort (March 29, 1952 CG&OMPress) should add new findings to the knowledge required for a continuing control program. It looks very much like we may be making some real progress in the overall pink bollworm battle.

• Deadline Extension

THE SOUTH TEXAS cotton planting deadline has been extended by Commissioner of Agriculture John C. White from midnight of April 20 to midnight of May 5. The Sept. 20 plowup deadline for the area is unchanged. White said the planting deadline extension was necessary to cope with drouth and hardship cases in the area. Since the extension was made, however, the Gulf Coast has had some beneficial rains, greatly improving cotton prospects. The planting deadline extension applies to Webb, Duval, Jim Wells, San Patricio, Aransas, Nueces, Kleberg, Zapata, Jim Hogg, Brooks, Kenedy, southern Refugio, and northern Hidalgo Counties.

• Handbook for Growers

COTTON GROWING in California comes about as close to being a factory-type operation as you will find anywhere in the Belt, but producing a crop in that second largest cotton state is not all peaches and cream. Especially for the thousands of farmers who planted their first cotton crop last year. Lack of experience resulted in poor yields for many. Some put on too much water, some not enough; others did not poison properly.

To give the newcomers a better opportunity to make a profit out of their production, the California Extension

NCPA's John F. Moloney Undergoes Operation

John F. Moloney, economist for the National Cottonseed Products Association, Memphis, is in Methodist Hospital in that city where he underwent an operation on April 19. John's many friends in the industry will be happy to learn that his condition is improving rapidly. The NCPA office in Memphis advised late this week that Moloney will probably remain in the hospital for another week or 10 days.

Service has put together a handbook that warns against the things which hurt last year, and shows, with a simple addition of costs incidental to producing a crop, where the average grower will have to produce almost a bale and a quarter to the acre to clear his expenses in 1952.

• Protest Cotton Loan Changes

VIRTUALLY ALL cotton interests, including the National Cotton Council, are vigorously protesting the proposed change in the CCC cotton loan regulations for 1952. The new procedure would deny the growers the right to sell their equities in loan cotton and require them to pay off the loan in cash before the cotton could go into trade channels.

The Government, it seems, thinks the change will place farmers in a better bargaining position to dispose of their cotton. But cotton people don't think so. Wm. Rhea Blake of the Cotton Council, in a letter to Secretary of Agriculture Brannan, said, "It is difficult to understand how more net proceeds can be obtained from a warehouse receipt than from a loan document which contains the official USDA grade and staple of each bale.

"We are firmly convinced," Blake continued, "that the proposed change will have the effect of placing the farmer at a disadvantage in disposing of his loan cotton. There will be very few farmers who will have the cash or sufficient credit to repay the loan. This will require that he locate a buyer who is willing to finance the transaction and accompany him to the bank or county PMA office so that the loan repayment and sale of the cotton may be done simultaneously. This obviously would narrow the farmer's market, as all potential buyers could not afford the time to handle the transaction. On the other hand, by permitting farmers to sell their equity they would be in a position to bargain with more buyers and obtain the best possible price. Furthermore," Blake pointed out, "under the proposed change, it would be impossible at times for farmers to go to the bank or PMA office and therefore impossible to take advantage of a particular market situation. The overall effect would greatly restrict the orderly marketing of cotton which was the basic reason for the establishment of the loan program."

• Some Controls Suspended

THE GOVERNMENT this week suspended price controls on vegetable oils and 15 other raw commodities because, OPS Director Arnall said, they are selling well below ceiling prices. But, he promised, controls will be clamped on again if prices of any of the commodities rise substantially. Too, Arnall said, the suspension order may soon be followed with another relaxing controls on raw cotton, textiles and clothing.

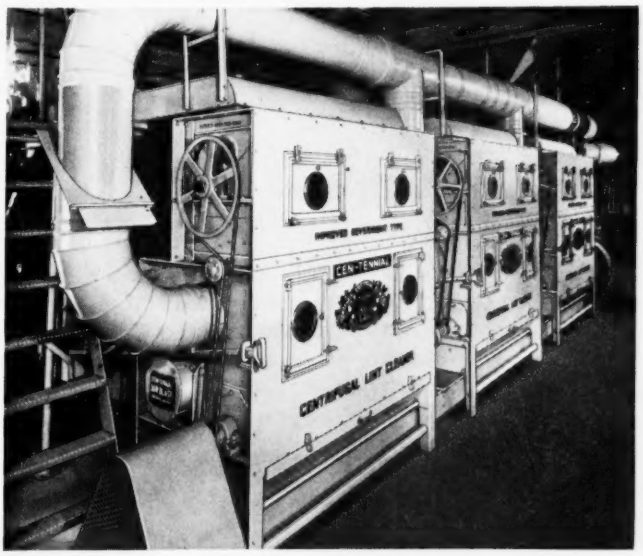
Alabama Farmers Plant Soybeans as Cash Crop

Soybeans for oil production is an important cash crop in Alabama in Baldwin, Escambia, and Jackson Counties, according to J. C. Lowery, Alabama Polytechnic Institute Extension Service agronomist.

He says that the crop is rapidly becoming popular in several other areas of the state, such as in the vicinities of Selma, Prattville, and Monroeville. In some sections yields in past years have been disappointing because of drought, unadapted varieties, or planting on land too poor to make good yields of soybeans.

"The planting date may extend from cotton planting time to June 15 in North Alabama and to July 1 in the Gulf Coast area," says Lowery. "On well built-up gray, sandy, and on the heavy red soils of the Limestone Valleys farmers are advised to use 300 to 400 pounds of 0-14-14. On land not well built-up, farmers should use 400 to 500 pounds of 4-10-7 per acre."

Farmers find that it is important to inoculate soybean seed, especially if they are being planted on the land for the first time.



FOR CLEANER COTTON WITHOUT WASTE INSTALL CEN-TENNIAL IMPROVED GOVERNMENT TYPE CENTRIFUGAL LINT CLEANERS.

May be easily installed behind any make or type of gin.

Either submerged or elevated lint flue may be used.

Lint cleaners are completely enclosed eliminating the continuous use of an extra man for operation.

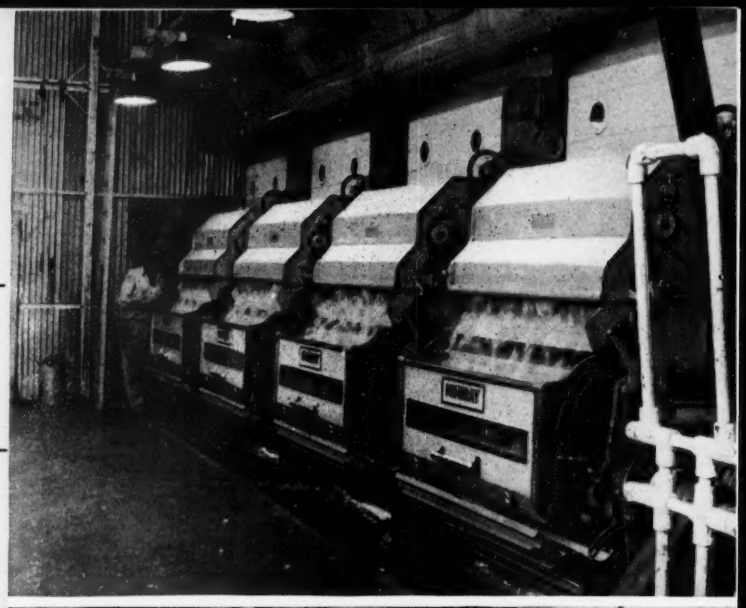
Three stand installation pictured at left.

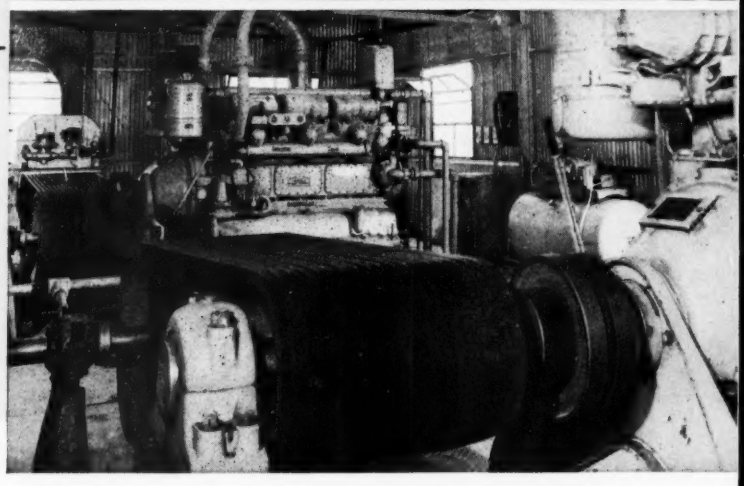
Write for Bulletin 51-L

CEN-TENNIAL COTTON GIN CO.

DALLAS, TEXAS • COLUMBUS, GA. • MEMPHIS, TENN.

Lots of Power... low upkeep





Morgan Gin Co., operating a modern plant at Morgan City, Mississippi, has proved the value of ample reserve power for ginning. Its twin battery 8/80 Murray Gin is powered by two "Caterpillar" Diesel D397 Cotton Gin Engines. Each engine drives a 4/80 saw outfit with 10 fans, 2 separators, 2 seven-cylinder cleaners, burr machine, distributor, super gems, 4 after cleaners, super unit feeders, 4 gin stands, lint cleaners, hydraulic pump, condenser and press.

Equipped to work in dusty, linty conditions, the big "Cat" D397s operate with a minimum of upkeep cost. W. H. Morgan, President and Manager of the firm, says: "For ginning we have a surplus of power, which gives efficient and constant operation of all machinery. With these 'Caterpillar' Engines we are giving the farmer the best samples possible, and that means a greater return on his cotton."

These days it is more important than ever for gin owners to give their engines good care. Proper lubrication and mechanical attention take only a few minutes a day, but they pay big profits in long, trouble-free work life. And when parts need rebuilding or replacement, you can count on your "Caterpillar" Dealer for the best in service.

CATERPILLAR TRACTOR CO. • PEORIA, ILLINOIS

CATERPILLAR

REG. U. S. PAT. OFF.

Cotton Gin Engines

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J. A. RIGGS TRACTOR COMPANY
Little Rock . . . Fort Smith
McGhee . . . West Memphis

GEORGIA

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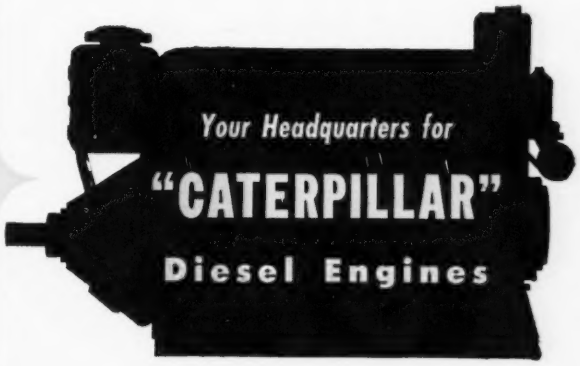
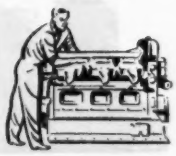
GENUINE "CATERPILLAR" PARTS...

When you deal with your "Caterpillar" Dealer you can count on genuine replacement parts — the very same parts that have made "Caterpillar" engines famous for 20,000, 30,000 and more hours of duty. No parts can replace "Caterpillar" for quality!





TIME-SAVING EXPERT SERVICE...

When minutes mean money — that's the time service by your "Caterpillar" Dealer pays off! His men are factory trained, methods are exact — special, precision tools speed up the job—that's backed by his guarantee. And service keeps pace with your engine 'round the clock!

G. A. SIMMONS . . . chairman, Beltwide Pink Bollworm Control Committee.

EUGENE BUTLER . . . who presided at the Waco pink bollworm meeting.

C. B. SPENCER . . . Texas crushers' agricultural director.

FIGHT AGAINST PINK MENACE PLANNED

DR. H. G. JOHNSTON . . . head of Texas A. & M.'s entomology department.

CLAUDE L. WELCH . . . of the National Cotton Council, Memphis.

BOB BOYD . . . of the State Department of Agriculture, Austin.

L. F. CURL . . . of USDA's Bureau of Entomology and Plant Quarantine.

PLANS FOR strengthening the pink bollworm control program at the grower level were outlined on April 11 at a meeting in Waco of the Pink Bollworm Subcommittee of the Insect Control Section of the Statewide Cotton Committee of Texas. Eugene Butler of Dallas, chairman, presided. Purpose of the strengthened program is to hold loss to the pest to a minimum, prevent further spread and, if possible, eradicate the pink bollworm in critical fringe areas.

Attending the meeting were representatives of the State Department of Agriculture; USDA's Bureau of Entomology and Plant Quarantine, state and federal Extension Services; vocational and veterans agricultural education; Farmers Home Administration; farm organizations; the National Cotton Council; the ginning and oil milling industries; chambers of commerce; banks; press and radio; and others.

It was agreed that pink bollworm control personnel, in cooperation with 7-Step Cotton Committees, will hold training meetings for farm leaders in infested counties. Complete information on identification, life history and control measures will be given at those meetings. This group is to be responsible for adapting and putting an effective control program into operation.

A special effort will be made to eradicate infestations on farms in fringe areas. When infestations are found, applications of poisons will be recommended to prevent buildup and spread. It was agreed that other needed control measures will be vigorously pushed. Further, it was agreed that major educational emphasis should be placed on cultural measures that will help eradicate or keep infestations low. New practices that will be advocated include:

1—Tarping or covering loads of seed cotton to prevent spread from farm to gin.

2—The use of stalk shredders.

3—Heavy and close grazing of harvested fields in areas where this practice is practical.

4—The use of defoliants to speed harvest and early stalk destruction.

5—General farm cleanup.

Pink bollworm research personnel agreed to provide the Extension Service with data on which to base informational releases. The Extension Service agreed to give wide coverage of the information through all news and agency outlets.

All agencies and groups represented at the meeting agreed that gins, oil mills and others are doing a good job of preventing spread of the pink bollworm through the movement of seed and lint, and their continued cooperation is solicited.

One of the major problems in the control program is pinpointing infestations on individual farms. While it was agreed that the present trash inspection system of the Bureau of Entomology and Plant Quarantine has yielded good results, it was pointed out that we need to be able to trace an infestation to the actual farm or farms in the community where the pink bollworm is known to exist.

A special committee to study this problem was named by Chairman Butler. Alfred M. Pendleton, USDA Cotton Ginning Specialist, Dallas, is chairman of this committee. Other members named so far are F. I. Jeffrey, of the Pink Bollworm Control Division of BEPQ, San Antonio, and Ed H. Bush, Texas Extension ginning specialist, College Station.

The committee, known as the Pink Bollworm Gin Trash Inspection Committee, met with an advisory group at Dallas on April 22 and discussed, among other things, new methods which might be used to take gin trash samples automatically. The recommendations of the committee are being put in final form and will be published in the May 10 issue of The Cotton Gin and Oil Mill Press.

Attending the Dallas meeting were Pendleton, Jeffrey, Butler; C. B. Spencer, agricultural director of the Texas Cottonseed Crushers' Association, Dallas; G. P. McCarty, of Continental Gin Company, Dallas; J. N. Day, of The Murray Company, Dallas; and R. P. Tull, of Swift & Company Oil Mill, Dallas.

Among those attending the meeting at Waco on April 11 were Butler, Spencer, Pendleton, Jeffery; G. A. Simmons, Lubbock, chairman of the Beltwide Pink Bollworm Control Committee; J. D. Prewit, vice-director of the Texas Extension Service, College Station; A. N. White, associate county agent, entomology, Weslaco; Geo. H. Hurt, division of vocational instruction, Austin; Scott Russell, supervisor of veterans education, Austin; L. J. Cappleman, state director, Farmers Home Administration, Dallas.

J. H. West, farmer, Bishop; Bob Gorham, farmer, Waco; Clement Von Roeder, farmer, Snyder; Minter Womack, farmer, Garland; Claude L. Welch, National Cotton Council, Memphis, Tenn.; Carlton H. Power, National Cotton Council field service, Dallas; Dr. H. G. Johnston, head of Department of Entomology, Texas A. & M., College Station.

A. J. Chapman, Bureau of Entomology and Plant Quarantine, Brownsville; L. F. Curl, Bureau of Entomology and Plant Quarantine, San Antonio; K. P. Ewing, Bureau of Entomology and Plant Quarantine, Waco; Bob White, Bureau of Entomology and Plant Quarantine, San Antonio; A. K. Inman and George W. Chowns, Bureau of Entomology and Plant Quarantine, Waco; Bob Boyd, division of plant quarantine, State Department of Agriculture, Austin; E. M. Cooke, executive secretary, Texas Cooperative Ginners' Association, Georgetown; George Logan, Citizens National Bank, Waco; Bill Durham, farm editor, Fort Worth Star Telegram, Fort Worth; Bill Tipton, editor, ACCO Press, Abilene; Ivan J. Campbell, Editor, The Cotton Gin and Oil Mill Press, Dallas.

Swiss Cotton Imports Show Slight Decrease

Imports of cotton into Switzerland during August 1951 through February 1952, the first 7 months of the 1951-52 season, totaled 133,000 bales (of 500 pounds gross), somewhat below the 149,000 bales imported during the corresponding period of 1950-51, according to reports to USDA.

More than 60 percent, or 83,000 bales, of imports thus far during the current season originated in the U.S., compared with only 20 percent, or 30,000 bales, imported from the U.S. during the first 7 months of 1950-51. Imports from Egypt decreased from 42,000 bales during August through February 1950-51 to 18,000 bales in the same months of 1951-52. Sizable imports were also received from Mexico and Peru, although quantities from both these sources have decreased during the current season compared with the preceding season.

FOR SALE

Six complete modern four section barrel French screw presses each with 50 h.p. motor and complete five high 72 inch cooker with 20 inch steel rings driven with 15 h.p. motor and Frenco overhead drive purchased new in 1950.

PITTOCK AND ASSOCIATES
Glen Riddle, Pennsylvania

From our Washington Bureau

By FRED BAILEY

Washington Representative

The COTTON GIN and OIL MILL PRESS

• **Job Holders Squirm**—While the self-elimination of President Truman from the presidental picture shocked government job holders in Washington, the real stunner was the disavowal of presidential ambitions by Gov. Adlai Stevenson of Illinois. It left them without a logical candidate to which they could turn strong Fair Deal sympathies.

Truman's withdrawal had been expected and those who hold their jobs by reason of political connections were all set to climb aboard the Stevenson bandwagon. Stevenson's announcement pulled the chair out from under them, leaving them no safe place to go.

They have two choices. Either they can seek a new candidate not now in the field, or they can switch to one of the three current Democratic presidential aspirants. It is pretty late to inject a new name into the campaign for delegates, although both Vice President Barkley and Averil Harriman are mentioned. (Ed. Note: On Tuesday of this week, Harriman announced that he is a candidate for the Democratic nomination, and will seek the Presidency on a Truman-New Deal-Fair Deal platform.)

The big shots in the Party have not made up their minds on what to do, but a surprising number of the small fry seem to be flocking to the Kefauver camp. Kefauver talk and campaign buttons suddenly have blossomed out in Washington like the spring flowers.

Before Truman withdrew, and even afterward and ahead of the Stevenson announcement, Kefauver talk was strictly taboo in government offices. It was generally understood that the White House and the Democratic National Committee would frown on such talk. However, the grapevine seems to have carried the word that no one would be punished if he liked Kefauver, and said so.

• **Kefauver Makes Progress**—Washington political observers now regard Kefauver as the No. 1 democratic candidate for the nomination. They have to admire the way he has gone out and campaigned without machine support, and they are impressed by the results.

Democrats would like a 100 percent Fair Dealer in the White House, but most of all they want a Democrat. Kefauver may not be a 100 percent Fair Dealer, but his record is acceptable to most party policymakers. They figure, too, that with him leading the ticket, the South would not bolt.

Sen. Kerr of Oklahoma is, of course, pretty close to being a 100 percent Fair Dealer, but the fact that he has drawn practically a blank in the campaigning has convinced party officials that he would have little chance against a strong republican candidate, such as Taft or Eisenhower.

Sen. Russell of Georgia is well-liked and highly respected, but his candidacy was advanced more as a rallying point for anti-Truman Southerners than as a serious contender for the nomination. No one here believes that a man from the Deep South would have much of a chance. Kefauver, although nominally a Southerner, is regarded as coming from a border state, Tennessee.

If we are to assume that Kefauver will be the nominee—still far from cer-

(Continued on Page 34)

IF YOU ARE NOT A FAR-SIGHTED PERSON

DON'T READ THIS!

But if you are thinking about your Bagging needs now, one of the first things you'll check on will be the new Southern Star Bagging Bale that's 1/3 smaller than former bales, saves you storage space and labor, transportation and storage costs!

OUR REPRESENTATIVES

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MEANS MONEY LOST!

Profit or loss for a year is often determined by the uninterrupted operation of equipment during "season." That's where quality pays off!

By supplying Southwestern ginners with nationally known, quality equipment and supplies, Briggs-Weaver has been helping make every year a good year . . a profitable year.

Whatever your need . . from gin saw files to hydraulic equipment; controls to conveying machinery; belting or boilers, etc. — just name it . . then call Briggs-Weaver and get it — quickly!

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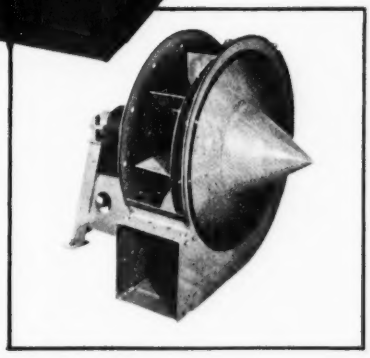
Distributors of Industrial Machinery
Machine Tools • Pumps and Motors Since 1896

HOUSTON — 300 S. Wayside Drive — YUkon-3361

We Speed Up Unloading with a BOARDMAN SUPERBLAST FAN!



We're always in a rush to get cotton unloaded and into the gin . . . and believe me, our BOARDMAN Superblast Unloading Fan does the job in record time.

Notice the perforated, cone-shaped screen that revolves with the blast wheel. It catches the cotton as it comes in, and lets the air go through.

There are two main purposes for the perforated cone. First, it increases the free opening area, so more air gets through quicker.

Second, it gives a sloping surface so the cotton can slide over quick and easy.

The cotton is thrown off the screen and picked up again by the air blast at the outlet.

The blades never strike the cotton. That eliminates roping of the cotton, cracking of seed and fire hazards, and speeds up the whole unloading job.

Take it from me — the BOARDMAN Superblast Unloading Fan will do a fast, economical job for YOU. See it today!

SUPERBLAST CONVEYING FANS
STEEL CONVEYOR BOXES & COVERS
PORTA-LOADERS
PNEUMATIC SEED CLEANERS

THE BOARDMAN CO.
OKLAHOMA CITY, OKLAHOMA
1403 S. W. 11TH ST. PH. MElrose 8-5435

Magic in Mexico

New Cottons Will Be Boon to Industry

■ **COOPERATIVE Winter Cotton Breeding Service aiming for greatly improved fibers years ahead of normal schedule.**

How important is the science of plant breeding to the American cotton farmer and to the consumer who uses cotton products?

Judging from some of the experimental work in cotton breeding now in progress, it's a science filled with all sorts of exciting new possibilities.

Take what's happening down in the sun-baked tropical village of Iguala, Mexico. Here in a mountain-enclosed valley about 126 miles south of Mexico City, the American cotton industry two years ago initiated one of the most far-reaching and significant seed breeding experiments ever undertaken.

Sponsored by the National Cotton Council, USDA, the cotton states experiment stations, and private seed breeders, the project—known as the Winter Cotton Service—is designed to give us vastly improved cottons years ahead of schedule.

This is how it's being done. In tropical Iguala, cotton can be grown during the winter months. So, in the fall, U.S. breeders select promising new cottons, airship them to Mexico for planting in October and November. By March, the winter crop is ready for harvest. The cotton is picked and ginned. Seed are sent back to the states for the regular spring planting. Thus, the breeder gets two crops in a single year.

Importance of the two-crop system is shown by the fact that normally it takes from a minimum of 7 to 10 or more years to perfect a new cotton to the point that seed can be produced commercially. Under the Iguala plan, this stabilization period can be reduced by an average of 30 percent.

In 1950, when the project was initiated, public and private breeders sent down 620 lots of seed. Last fall there were 782 lots—each of which holds potentials for a new cotton. Virtually every federal and state experiment station in the Cotton Belt, as well as all the major private breeders, is participating in the experiment.

Some of the new cottons show promise of further improving the qualities which have made cotton the world's most widely used fiber.

For instance, there are the new triple hybrids. These are crosses of American upland cottons with Asiatic cottons and wild cottons. Some triple hybrids offer great new fiber strength. Tests of these have shown a tensile strength 50 percent greater than that of conventional U.S. cottons, whose strength is roughly equivalent to that of structural steel.

Improved strength will improve greatly cotton's competitive position in such key markets as tire cord, industrial hose, thread, transmission and V-belts, and laundry nets, to mention only a few.

Other triple hybrids have a luster approaching that of silk. And greater luster would stimulate demand for cotton in such a variety of products as women's apparel, men's sport shirts, rainwear, table cloths, and luggage linings.

Likewise of importance are improvements in American-Egyptian cottons. As a result of the Iguala speed-up, the U.S. Cotton Field Station at Sacaton and the University of Arizona probably will be able to make available commercially by 1954 a greatly improved American-Egyptian variety.

The new variety has good strength, it spins well, and most important, it yields about 5 percent more lint than the American-Egyptian varieties previously grown in the U.S. This higher yield may make it possible for U.S. cotton farmers to produce American-Egyptians economically and in sufficient volume to make this country independent of outside sources of extra long cotton fiber.

But strength and luster and better American-Egyptians are by no means the extent of improvements for which breeders are searching. Across the Belt, the picture is something like this:

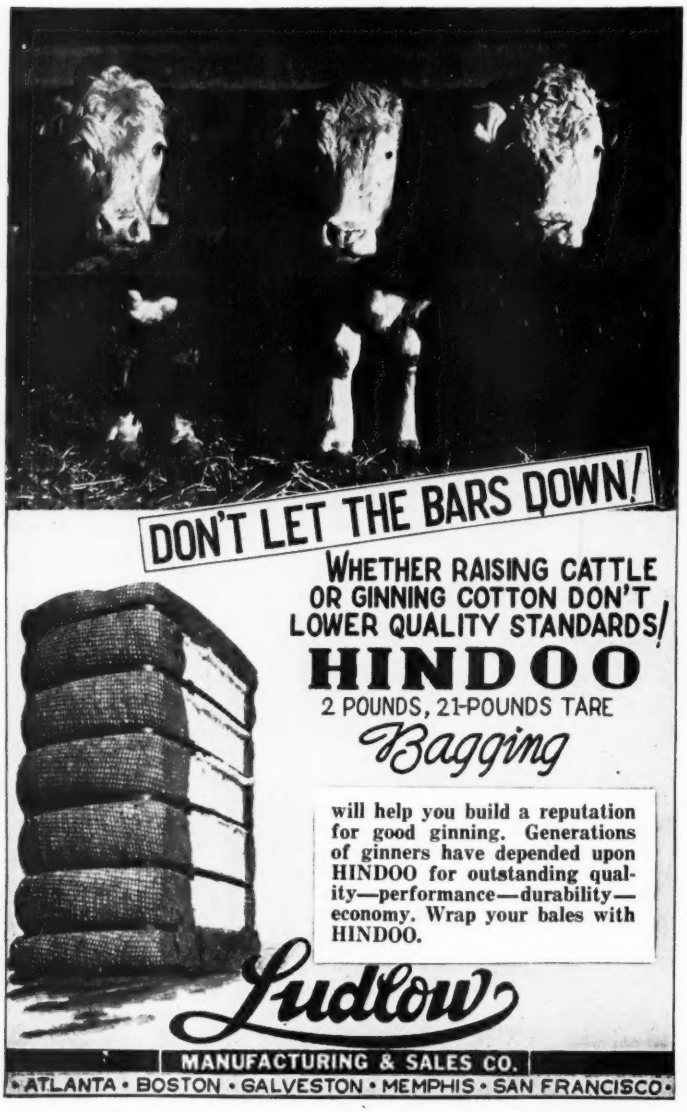
California: Increased strength and luster in Hopi Acala cottons.

Arizona: Improved American-Egyptian varieties.

New Mexico: Higher yielding cottons of the 1517 variety; American-Egyptian better suited to planting at high altitudes; and cottons with a greater resistance to verticillium wilt.

Texas-Oklahoma: Cottons with better bacterial blight resistance (this disease in 1951 cost Plains cotton growers over $15,000,000); early maturing varieties

(Continued on Page 33)


DON'T LET THE BARS DOWN!
WHETHER RAISING CATTLE OR GINNING COTTON DON'T LOWER QUALITY STANDARDS!
HINDOO
2 POUNDS, 21-POUNDS TARE
Bagging
will help you build a reputation for good ginning. Generations of ginners have depended upon HINDOO for outstanding quality—performance—durability—economy. Wrap your bales with HINDOO.
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• ATLANTA • BOSTON • GALVESTON • MEMPHIS • SAN FRANCISCO •

National Ginners' Steering Committee Meets May 22

J. F. McLaurin of Bennettsville, S. C., president of the National Cotton Ginners' Association, has called a meeting of the officers and members of the steering committee at Memphis on May 22. Purpose is to set up a committee structure under which matters of importance to the industry will receive attention throughout the year.

The steering committee includes McLaurin, Association Vice-President S. N. Reed of O'Brien, Texas, and L. G. Black of Corning, Ark. Others who will attend the May 22 meeting are Vice-Presidents A. G. Swint of Orchard Hill, Ga., G. T. Hider of Lake Providence, La., and Secretary-Treasurer Carl Trice Williams of Jackson, Tenn.

Southland Purchases Mill At Tallulah, Louisiana

Announcement was made this week by Jas. R. Gill, vice-president and general manager of Southland Cotton Oil Company, Paris, Texas, that the company had purchased the Tallulah Oil Mill & Gin, Tallulah, La. Southland will take over operation on June 30 and the name of the mill will be changed to Southland Cotton Oil Company. Maxwell Yerger will continue as manager of the mill, which crushes cottonseed and soybeans.

Texas Directors Re-elected

It was announced this week that the directors and executive committee of the Texas Cotton Ginners' Association have re-elected Max Smith, San Marcos; S. N. Reed, O'Brien; and Jerome Jalufka, Violet, as directors of the National Cotton Ginners' Association. They will serve a term of three years. Reed is the newly elected president of the Texas association, Jalufka the new vice-president, and Smith a past president.

National Ginners Association Plans A New Bulletin Service

We learn from W. Kemper Bruton, executive vice-president of the National Cotton Ginners' Association, that the organization will soon inaugurate a new regular bulletin service for the membership. The bulletins will be prepared in the Association's office at Blytheville, Ark.

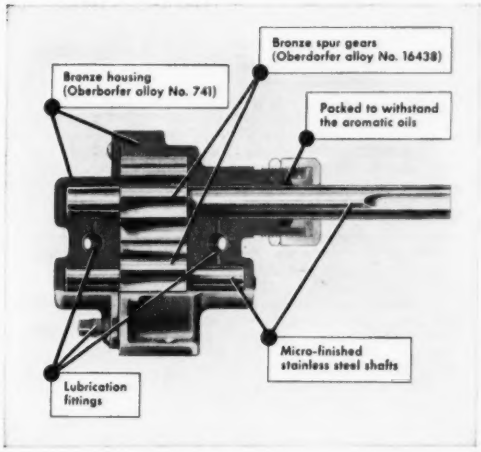
Du Pont to Celebrate Anniversary

The 150th anniversary of the establishment of E. I. du Pont de Nemours & Company will be marked July 18 at the site of the first Du Pont powder mills on the banks of Brandywine Creek a few miles from Wilmington, Del. The ceremonies, which will include a simple historical dramatic prologue, addresses by company officials, and the dedication of a marker on the site of the first plant, are the focal point of observances by the Du Pont Company.

About 6,000 spectators—representatives from the 71 plants and Wilmington offices, retired employees, members of the du Pont family, and guests—will be on hand for the program. Thousands of men and women at Du Pont plants, laboratories and sales offices, as well as their families and friends, across the country can hear the program which will be broadcast over a national network.

In the course of the program on the Brandywine, Crawford H. Greenewalt, president of the Du Pont Company, and Henry B. du Pont, vice-president and member of the Executive Committe, will speak, while Walter S. Carpenter, Jr., former president and now chairman of the board, will dedicate a marker formed by one of two huge millstones ordered from France by the founder of the company in 1801. The stone weighs about seven tons, and its function, by the application of water power, was to grind the ingredients of black powder—sulfur, charcoal and saltpeter. Bronze plaques designed and executed by Domenico Mortellito, Wilmington sculptor, will be mounted upon the stone, which in turn will rest upon a granite base.

The story of Du Pont's growth will be told in a book, "Du Pont—The Autobiography of an American Enterprise," to be published about the first of July. The theme of the volume is the parallel development of the Du Pont Company and the nation over a century and a half. Largely pictorial, with many illustrations in color, the book will relate the company's activities and operations to broad economic and social developments in the U.S.


Bronze spur gears (Oberdorfer alloy No. 16438)
Bronze housing (Oberborfer alloy No. 741)
Packed to withstand the aromatic oils
Micro-finished stainless steel shafts
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Correct Farm Spraying is

Metered

SPRAYING

It is costly to spray any way but exactly. All of the 300 styles and sizes of new Oberdorfer Bronze Gear Pumps are metering pumps, enabling you to spray exactly the correct amounts.

Why pay more when the best costs less? Buy Oberdorfer Pump-equipped farm spraying equipment.

Agricultural Pump Division
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OBERDORFER

BRONZE SPRAYING PUMPS

Southern Lab Develops New Cotton Bandage

A new type of cotton bandage, developed by USDA's Southern Regional Research Laboratory, is now being made commercially for the Armed Forces and may soon be available for civilian use. The outstanding feature is its ready adaptability to irregular contours of the body.

This conformity is gained by means of a simple chemical treatment which involves allowing ordinary open-weave gauze to shrink freely and completely in a caustic soda solution of about 20-30 percent concentration. After washing out the caustic and neutralizing with a dilute acid, the gauze is thoroughly washed and then dried with a minimum of tension. In contrast to ordinary gauze, this modified gauze is non-slipping because the kinks in the treated yarns cause successive layers to cling together.

W. J. Ramey, 40 Years With Swift, Retires

W. J. Ramey, assistant manager of Swift & Company's general refinery department, Chicago, retired on pension recently after 40 years with the firm. The veteran Swift man plans to move to Florida to "relax and enjoy life."

Ramey, a native of Cleveland, moved with his family to Canada in 1901 and joined Swift Canadian in 1912 at the Winnipeg plant. He joined Libby, McNeill and Libby (no longer a Swift subsidiary) in 1920 and spent a year in San Antonio before going to the Chicago office to organize a hotel and restaurant department.

Ramey stayed with Libby until 1931, then returned to Swift as head of the canned foods department. He transferred to the general refinery department in 1933 and for the past 16 years has been assistant head of that department.

His many Swift friends showered Ramey with presents at a farewell party early in April. Among the guests were N. B. Swift, grandson of the founder of Swift & Company, and Vice-President O. E. Jones.

Louisiana Oil Mills Award Trophies to Show Winners

Louisiana Cottonseed Crushers Association provided trophies for the grand champion and reserve champion lambs at the recent Louisiana State University fat stock show.

The awards are a part of the program of cooperation with livestock shows which members of the Louisiana association began several years ago as a public relations activity. The program has resulted in the oil mill industry receiving wide recognition for its cooperation with livestock activities.

Representing the Louisiana association, Dalton E. Gandy of the NCPA Educational Service presented the trophies to the winners at the show. A picture of the presentation has appeared in Louisiana newspapers. Gandy has worked closely with Louisiana crushers and livestock leaders in developing this program.

Archer-Daniels-Midland Co. Plans Expansion Program

A major expansion and modernization program of the Buffalo, N. Y., facilities of Archer-Daniels-Midland Co., manufacturer of linseed oil, has been announced by William A. Foley, plant superintendent.

The proposed new facilities, which have been approved by government agencies, will include a 5½-story extraction building and 4-story preparation building for a new solvent extraction plant, a powerhouse with all new equipment and a 2-story office building, including a products control laboratory.

Plans for the expansion program, Foley said, now are in the advanced engineering stage, subject to approval by city engineers. Construction of the boiler house is expected to start within a month.

William LeRoy Weber, Jr., Marries Miss Winchester

Miss Marie Therese Winchester and William LeRoy Weber, Jr., were married April 19 in Shreveport, La. The bride is the daughter of Mr. and Mrs. Peter Sidney Winchester of Shreveport, and the groom is the son of Mr. and Mrs. W. LeRoy Weber, Sr., of Taft, Texas. Mr. Weber, Sr., has played a prominent role in the oil milling industry for many years.

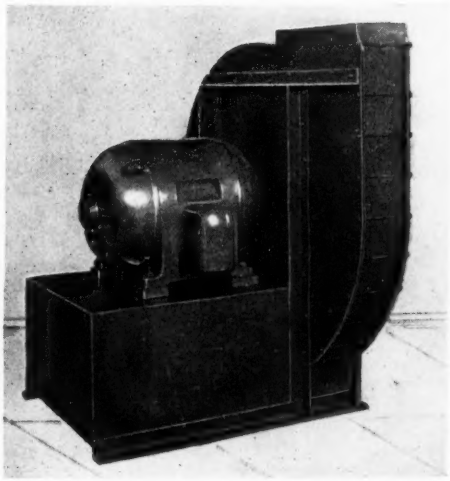
• Equipment now being used by U.S. farmers is valued at more than $15,000,000,000.

THE RUBBER BLADE COOLING FAN

Recognizing the advantages of this fan, many of the leading engineers have adopted it exclusively.

This fan is capable of developing a vacuum of 36 inches in water. Resistance of seed is only a small percent of this capacity; balance is free to pull cool air through the seed.

Cooling Seed the Quickest Way Can Be Too Slow



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BULK-FLO gives positive, gentle handling—full or partially loaded

LINK-BELT's combined feeder-conveyor-elevator profitably handles bulk materials

YES, only BULK-FLO gives you all these advantages in a single unit . . .

1. *Positive movement* of material. *Solid* flights substantially cover area of casing—no avalanching on vertical or steeply inclined runs.
2. *Gentler handling.* Material is protected in individual "compartments" for minimum degradation.
3. *Self-clearing.* To permit alternate handling of different materials and to prevent contamination of batches.
4. *With constant speed,* capacity can be varied by regulating feed.
5. *No contamination* from lubrication.
6. *Chains and casings* can be metal-coated or made of alloy. Dust-tight. Can also be liquid- and vapor-tight.
7. *Horizontal, inclined, vertical* or a combination of these paths in a single unit—often requiring less units, in less space, at lower cost.

Ask your Link-Belt representative for further information. Or write for your copy of Book 2475.

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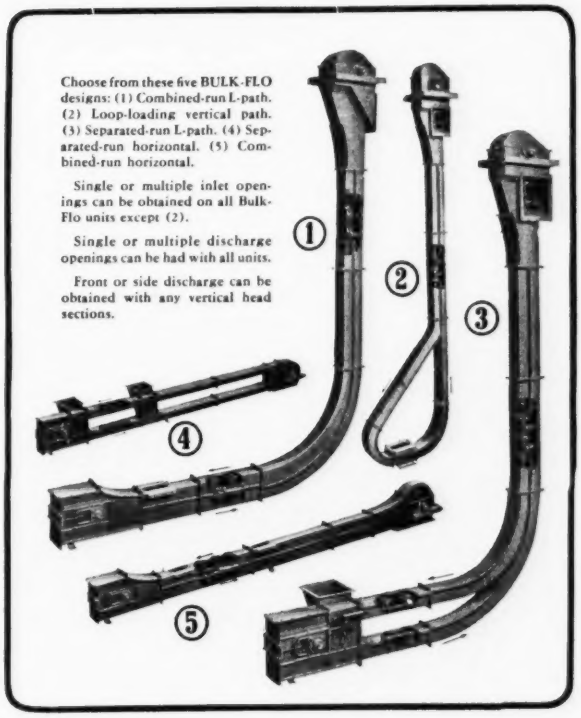
Choose from these five BULK-FLO designs: (1) Combined-run L-path. (2) Loop-loading vertical path. (3) Separated-run L-path. (4) Separated-run horizontal. (5) Combined-run horizontal.
Single or multiple inlet openings can be obtained on all Bulk-Flo units except (2).
Single or multiple discharge openings can be had with all units.
Front or side discharge can be obtained with any vertical head sections.
1
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3
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5

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RATES: Ten cents per word, per insertion. Include your firm name and address in count. Minimum advertisement $2.00. Strictly cash basis—enclose check with order. Write copy plainly.

Oil Mill Equipment for Sale

OIL MILL EQUIPMENT FOR SALE—Anderson Expellers, French screw presses, cookers, dryers, rolls.—Pittock and Associates, Glen Riddle, Pa.

FOR SALE—72-85" cookers, rolls, formers, cake presses and parts, accumulators-pumps, hull-packers, Bauer No. 153 separating units, bar and disc hullers, beaters-shakers, Carver linters, single box baling presses, filter presses, expellers, attrition mills, pellet machines, pneumatic seed unloader. If it's used in oil mill, we have it.—V. A. Lessor and Co., P. O. Box No. 108, Fort Worth, Texas.

OIL MILL MACHINERY FOR SALE: Cookers — Rolls — Pumps — Presses — Cylinders — Heads — Columns — Formers — Accumulators — Hydraulic Pumps — Hot Cake Cutters and Strippers — Filter Presses — Electric Motors, 15 to 150 h.p. with starters — Screw Presses — 30" Chandler Huller — Carver Lint Tailing Beater. — Sproles & Cook Machinery Co., Inc., 151 Howell St., Dallas, Texas. Telephone PRospect 5958.

FOR SALE—Press room equipment consisting of 9 hydraulic presses, 15 boxes each; 1 Davidson-Kennedy 78 inch 3 high cooker; 1 low pressure pump with accumulator; 1 DK high pressure pump with 8 plungers; 1 DK cake former; 1 Helm hot/cold cake cutter; also have a Helm junior model pellet machine with one set dies included. This machinery is in good operating condition and was used this season.—Continental Oil-Cotton Co., Colorado City, Texas. Phone L. D. 1.

FOR SALE—Immediate removal. One complete cottonseed oil mill. Good number of French screw presses and Anderson expellers. Oil mill parts. See us for information or anything needed in the oil mill line.—Temple Machinery Supply Co., Temple, Texas.

FOR SALE—One Proctor & Schwartz, 5-section, cotton linter dryer, 8 feet wide belt.—AMKO Products Co., P. O. Box 831, Rochester 3, N. Y.

Gin Equipment for Sale

FOR SALE—4-80 saw Murray gin stands, modern glass fronts, new saws and ribs. Four Super Mitchells for above, all in good condition, ready to gin cotton.—Farmers Union Coop Gin, Hinton, Okla.

GOOD USED AIR BLAST GINS—5-80 saw Murray, loose roll, glass front, direct connected gins. 5-80 saw Murray steel B. B. 6" mote conveyor standard direct connected gins with first class lint-flue. 4-80 saw Munger bail bearing direct connected gins with lint-flue. 4-80 saw Lummus "automatic" gins, complete with lint-flue and condenser. 4-70 saw Munger gins. 4-70 saw Pratt gins. Tell us your needs.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—In Mississippi County, Arkansas, heart of the cotton country. 4-80 saw Continental gin, Mitchell feeders and dryers, up-packing press. Steam power, large bale warehouse and seed house, Fairbanks-Morse scales, large office, home on site, located on Main Line Frisco. Competition limited. Very reasonable—terms. Write Box "RS" in care of The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

FOR SALE—One complete 4-80 Hardwicke-Etter gin. LeRoi engine power. Excellent condition. Insufficient cotton raised to justify continued operation.—Toller Bros., Fort Smith, Ark.

FOR SALE—Complete gin, 5-70 saw outfit with M.M. power (or Twin City engine). If interested come and see the plant at Travis, Texas.—M. A. Holscher, Travis, Texas.

FOR SALE—Special bargain buys in Rio Grande Valley and South Texas cotton gins. Contact me for details.—M. M. Phillips, Phone No. 5-8555, P. O. Box No. 1288, Corpus Christi, Texas.

FOR SALE — Five-eighty Continental, model C gins, five double X feeders, blast fan.—Farmers Co-operative Gin Co., Grandfield, Okla.

COTTON GIN BUILDINGS—All steel—completely prefabricated, ready to bolt together. Can be modified for any type of gin operation, for immediate shipment anywhere in the U.S.A. — Marvin R. Mitchell Steel Bldg. Co., 1220 Rock Island, Dallas, Texas, Phone RAndolph 5615.

FOR SALE—To be moved 3-80 Lummus air blast gins, steel down-packing press, MEF cleaner-feeders, 10 ft. hull separator, 5-cylinder cleaner, 60 inch condenser, conveyor-distributor, 11-shelf tower dryer, butane gas heater with vaporizer and tank, seed scales, 15-ton Howe truck scale, 150 h.p. electric motor, starting equipment and transformers. All steel building 88' x 30' with 24' walls. Full length wagon canopy shed with metal seed bins. Complete outfit new 4 years ago. Ginned less than 3500 bales—price $30,000.00.—T. D. Reidling, Commerce, Ga.

FOR SALE—72" Hardwicke-Etter all-steel condenser and 6-80 lint flue. Good as new. Priced to move. London Co-op Gin, Rt. 3, Box 364, Corpus Christi, Texas.

SOME SPECIAL VALUES — Used and reconditioned equipment. One 14' Wichita wood burr machine, rebuilt like new. 4-66" standard Mitchell F.E.C. pressed steel flat belt extractors. 4-66" model "H" Mitchells. 8-66" Continental double X model "D" extracting feeders. Several batteries of Hardwicke-Etter extracting feeders. One 52" Murray "master six" steel incline cleaner. One 7-cylinder and one 5-cylinder Hardwicke-Etter ball bearing wood frame incline cleaners. One Murray "PH" steel bound press. Hydraulic Pumps: One Continental vertical triplex. Two Murray horizontal triplex with one pulley each. One Union triplex and one Lummus triplex each with two pulleys, or Lummus with chain drive and 10 h.p. motor. One 4-plunger rebuilt Beaumier. One 52" Murray "MS" steel separator. One 50" Continental steel screen drum separator. One 48" Hardwicke-Etter wood dropper. One Fairbanks double hopper seed scale. One 25 h.p. vertical boiler with automatic gas burner. One 60 h.p. Allis-Chalmers, 2200 volt slip-ring motor, 900 r.p.m. One 50 h.p. G.E., 220 volt, 1200 r.p.m. motor. One 10 h.p., 220 volt Westinghouse 1200 r.p.m. motor. New Pulleys and rebuilt fans, shafting, pulleys and transmission equipment.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—One 1936 Gullett mechanical tramper, $300.00. Four 1931 model 80-saw brush Continental gin stands, double-breasts, $400.00 for all. One 1941 66" Conv. Mitchell cleaner $350.00.—T. J. Hays, Hollandale, Miss.

FOR SALE—Four stand Continental cotton gin (3-70 and 1-80) saw Munger ball bearing; steel Mitchell extractor feeders; F.E.C. belt distributor, double box hydraulic press, ram and case, E.J. tramper, belt pump. Powered with 60 h.p. Fairbanks-Morse full diesel, cold start model 32. All in first class condition and must be seen to appreciate. Priced to sell.—Curtis C. Wright, 323 N. 15th St., Fort Smith, Ark.

COMPLETE GINS FOR SALE, FOR REMOVAL —One 4-80 saw Murray plant, complete with double extraction, glass front gins, drying system, electric power, etc., with or without all steel building. One 4-80 saw 1937 model Cen-Tennial steel gin outfit, operated very little, direct connected gins, conveyor-distributor, steel cleaner and dropper and condenser. Steel bound press, a 15-ton, 9' x 34' Fairbanks scale, one 100 h.p. 2200 volt motor with V-belt drive, etc., less building, priced very low. One 5-80 saw Hardwicke-Etter plant, complete with excellent steel building. Equipment includes all steel gins, extracting feeders, conveyor-distributor, two cleaners, all steel press and equipment, Murray tower drier, seed steriliser, etc. A real bargain.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—72" Murray incline cleaner, 7-cyl. 60" Murray dropper. Murray big reel drier and gas burner (only 500 bales have been run through this drier). 72" Murray condenser. 72" Lummus condenser.—Hatch Coop Gin Co., Hatch, N. M.

FOR SALE—4-80 Hardwicke-Etter extractor feeders, 3 years old. 1-90 Hardwicke-Etter extractor feeder, one year old. Guaranteed first class operating condition.—R. E. Coleman, Cottonwood Gin Co., Lake Arthur, N. M.

FOR SALE—5-70 saw Continental, brush, I.S.B. gins with model 30 fronts. The saws on these gins have only ginned 4,900 bales. Five 60" convertible Mitchell extractor feeders, V-belt drive. Five 70-saw belt distributor, condenser, and lint flue. All for $1,500.00. This equipment is in good condition. The stands or the feeders, either one alone, would be cheap at that price.—Davis Gin, Eldorado, Okla.

FOR SALE—Complete modern gin to be moved. 4-80 all steel Continental brush gin, direct connected. Everything on V-belt drives. 4-X feeders, tower drier with incline cleaner. Down packing press. 10' x 28' truck scales. Electric power. All steel sectional type Continental Bldg., 80' long. Must see to appreciate. Write Box 'MG," c/o The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas, Texas.

FOR SALE—Modern, well equipped 4-80 Continental gin plant, model C V-belt drive brush gins with "30" fronts, new Mitchell special super units, 12-cylinder Murray steel cleaner, new Lummus steel press, steel condenser and tramper, good 1947 M - M 6 - cylinder 242 h.p. butane engine, Mitchell drying system, iron-clad gin building new 1942, modern 4-room manager's residence, housing for crew, 5,000-bale location in Bailey County, Texas (Stegall Community). Price $47,500. Contact: N. B. Embry, Box 768, Littlefield, Texas, phone 973.

FOR SALE—One 5-cyl. steel H. E. incline cleaner. One Murray cotton press pump. One 48" steel H. E. condenser, side discharge. One steel 60" H. E. condenser, top discharge. Two steel 4-cyl. Murray air line cleaners. One H. E. ram and casing, new.—Hughston Sales Co., P. O. Box 348, Farmers Branch, Texas. Phone Dallas—NIchols 7-7175.

FOR SALE—Murray up-press, steel bound, with automatic tramper, ram and casing in good condition. Also two three-drum Murray cleaners, one equipped with ball breaker, both complete with pulleys.—New Model Gin, Covington, Tenn.

ELECTRIC MOTORS
Sales — Repairs

To better serve the Southwest cotton industry we now pick up and deliver **FREE** any equipment for sale or repair. Don't be shut down! Call us and we will deliver a loan motor to your plant free while we repair your equipment in our shop.

To further our aim to give fast and dependable service, we have established a motor repair shop at Harlingen, Texas.

Take advantage of factory-trained men, large copper wire availability, expert machinists, accurate balancing and testing equipment. Our facilities are as close as your telephone, and no more expensive than if done in your city.

Partial list of motors we have for immediate delivery:

1—300 hp. 3/60/2300/600 rpm, slip ring
1—250 hp. 3/60/440/600 rpm, slip ring
4—200 hp. 3/60/2200/900 rpm, slip ring
1—200 hp. 3/60/440/900 rpm, slip ring
4—150 hp. 3/60/2300/900 rpm, slip ring
2—150 hp. 3/60/440/900 rpm, slip ring
3—125 hp. 3/60/440/900 rpm, slip ring
2—125 hp. 3/60/2200/900 rpm, squirrel cage
2—125 hp. 3/60/440/900 rpm, slip ring
1—100 hp. 3/60/2200/900 rpm, squirrel cage
2—100 hp. 3/60/220/900 rpm, squirrel cage
4—100 hp. 3/60/2200/900 rpm, slip ring
2— 75 hp. 3/60/440/900 rpm, slip ring
2— 75 hp. 3/60/220/1200 rpm, squirrel cage

Fan and Press Pump motors and all other ratings in stock.

CALL ON US — DAY OR NIGHT — ANYWHERE

Complete starting equipment available for above motors.
Free rental while we repair your motors.

W. M. SMITH ELECTRIC CO.

Phone NUnter 2801 DALLAS — TEXAS — Phone 3905 HARLINGEN

FOR SALE—4-70 Murray stands, $100.00 each. 4-60" Mitchell F.E.C. machines, $100.00 each. 1 Anderson, 110 h.p., 250 r.p.m., style Y diesel engine with clutch, stub shaft and belt, $1,000.00. This equipment is not junk. 1-75 h.p., 900 r.p.m., 440 volt Fairbanks-Morse motor with all controls and switches, $1,000.00. — Gandre Bros., Cost, Texas.

FOR SALE TO BE MOVED—Less building and power, 4-80 Murray with glass fronts and roll dumps, Mitchell extractors, H-E overhead burr machine, seed scales, steel bound press, steel tramper, steel condenser, and all complete for $6,500.00.—Bill Smith, Fulwiler Bldg., Phone 4-9626 or 4-7847, Abilene, Texas.

FOR SALE—6 Lummus air jet lint cleaners with lint flue 60" condenser and fan. 5-80 Lummus glass front gins. 3-80 saw Murray gins with glass front and roll dump. 4-80 model C all steel Continental brush gins with 30 fronts. 4-80 model C all steel AB gins with 30 fronts. 8-60" standard Mitchells with flat belt drive. 5-52" V-belt super Mitchells like new. 1-60 super Mitchell with V-belt drive. 1-60" V-belt standard Mitchell equipped for drying. 1-66" flat belt standard Mitchell. 1-14' Lummus steel burr machine. 1-14' steel Wichita burr machine with long and short bypass conveyor. 1-14' Wichita steel burr machine with 14' long 3-cylinder after cleaner. 1-14' H-E wood burr machine with long and short bypass conveyors. 1 11-cylinder 50" H-E V-belt inclined steel blow-in type cleaner. 1-72" Continental impact cleaner. 1 5-cylinder 52" steel incline Continental cleaner and supports. 3 4-cylinder Continental inclined steel cleaners. 3 8-cylinder 50" Stacy steel horizontal cleaner. 1-52" 6-cylinder Mitchell jembo cleaner, drier and extractor with steel supports, burner, piping and fan. 1-52" 3-cylinder Mitchell pre-cleaner. 1-52" 6-cylinder horizontal Murray steel cleaner. 2 12-section thermo cleaner like new. 1 '16-section Lummus thermo cleaner. 1-52" Continental steel separator. 1-52" 1949 model Gullett steel separator. 1 6-cylinder air line steel cleaner. 1 2-cylinder Lummus air line cleaner. 1-60" H-E side discharge steel condenser. 1-72" H-E side discharge steel condenser. 1-60" Gullett down discharge steel condenser. 1-60" Murray down discharge steel condenser. 1-60" Continental down discharge steel condenser. 1 2-trough Continental drier. 1 Continental steel bound paragon press, ram and casing. 1-60" new Lummus side discharge condenser in Mississippi.—Bill Smith, Fulwiler Bldg., Phone 4-9626 or 4-7847, Abilene, Texas.

FOR SALE—9" conveyors, left and right, $1, 50 ft. 66" Wood conden.er, $50. Good Wood 5-belt distributor, $35. 5 Wood ball bearing 70 Pratt brush gins with feeders, lint flue, $225.—Manor Gin, Manor, Texas.

FOR SALE—One Hardwicke-Etter conveyor distributor and rotor lift, one Continental paragon steel bound press, doors open with a wheel and weights are under floor, hydraulic press pump which is a Continental upright type, three flat belt F.E.C. Mitchells, 165 h.p. gas engine, butane equipped.—R. I. West, Pierce, Okla.

FOR SALE—1 53-inch, 4-cylinder Mitchell cleaner complete, $500.00. Extra cylinder free.—J. E. Boyd Gin, Port Lavaca, Texas.

FOR SALE—1 all-steel H-E 50" separator, 15 all-steel H-E 50" cleaner cylinders. 1 Continental wood condenser, 60". 1 Continental 4-80 belt driven wood distributor. 2 belt driven wood seed elevators. See or write Enast Afton Gin, Afton, Texas.

FOR SALE—4-70 saw electric gin, Pratt stands, Murray hydraulic pump and packer, XXX extractors feeders, good belts, good press, good unloader. Contact W. W. Fargo, Box 265, Telephone 16, Stuart, Okla.

FOR SALE—At very low prices, several gin plants located in central Oklahoma. Will sell machinery only or entire plants to be moved.—Southwestern Cotton Oil Co., Oklahoma City, Box 1217, Phone 3-8311-Knipe.

FOR SALE—3-80 saw Murray gins, roll dump fronts. 3 standard 1937 model Mitchells. 1 50" down draft all-steel condenser and 3-80 lint flue. 1 3-80 double conveyor-distributor. $3,000.00 for all. Write Box "AC" c/o The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas, Texas.

Equipment Wanted

WANTED—One Carver, 36" perfection huller.—E. O. Seabold, 1622 McLemore, Memphis, Tenn.

WANTED—One or more 80-saw F-3 Continental brush gins.—Orb Coffman, Goree, Texas.

WANTED—1 M. B.T.U. butane burner with 35" blower.—Gandre Bros., Cost, Texas.

WANTED—Several used linters with or without condensers. Advise price, condition, location.—H. H. Shelley, Headland, Ala.

WANTED—Steam engine for gin. Must be in good shape. Should be about a 14 in. x 18 in., 200 r.p.m., for right hand setting.—J. W. Goode, Mangum, Okla.

WANTED—One used steel bound, up-packing press, swing type doors. Prefer Lummus.—Newman Walpole, Brownsville, Tenn.

WANTED—1 delinting plant with one or two stands, with shakers and treaters complete.—Farmers Home Gin Company, Inc., Leighton, Ala.

WANTED—One 14' steel burr extractor. Write me what you have to offer.—Manor Gin, W. A. Hiller, Manor, Texas.

Personnel Ads

GIN OPERATOR WANTED—Electric, modernly equipped plant located north part of Delta. Prefer family man, must be thoroughly capable, honest, strictly sober and reliable. Invite correspondence with this kind of man. Write Box "TR" c/o The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas, Texas.

WANTED—Superintendent job in an Expeller Mill either French or Anderson screw presses. Am experienced in all type of oil mill machinery, but prefer an expeller mill. Best of references furnished. Write Box "PD" c/o The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas, Texas.

WANTED—Job as gin manager. 25 years experience as manager and owner, four years as superintendent of gin plants for one of the largest cotton companies in the world. Write Box "EG" c/o The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas, Texas.

Power Units and Miscellaneous

FOR SALE—20-ton, 34-ft. Fairbanks-Morse scales. Call W. E. Rosenbum, Hugo, Okla.

ALL STEEL BUILDINGS—Any size, any shape, for any desired use—warehouses, cotton seed houses, gin buildings, etc. Newest design, completely prefabricated and ready for immediate shipment anywhere in the U.S.—Marvin R. Mitchell Steel Bldg. Co., 1220 Rock Island, Dallas, Texas, Phone RAndolph 5615.

FOR SALE—1 rebuilt model 1210-12A Moline engine 220 h.p. 2 rebuilt 8 x 9 4-cylinder Moline engines 150 h.p. 1 rebuilt 35 h.p. Moline engine. New Moline engines in stock for immediate delivery. Call us for parts and service day or night.—Fort Worth Machinery Co., 913 East Berry, Fort Worth, Texas.

FOR THE LARGEST STOCK of good, clean used gas or diesel engines in Texas, always see Stewart & Stevenson Services FIRST. Contact your nearest branch.

FOR SALE—One 8 x 9, 4 cyl. 100 h.p. M-M (Twin City) engine, only ginned approximately 10,000 bales cotton, equipped with starter, generator, and in good condition.—Schrade Gin Co., 3 miles east Rowlett, Texas, Old Highway 67.

FOR SALE—Engines: Caterpillar D17,000, Serial No. 9J5100SP. Caterpillar D13,000, Serial No. 9J899. International PD80, Serial No. PDJ1769. Write: Bertig Company, Box 475, Paragould, Ark.

COTTON GIN ENGINE—Late model, 8-cyl. LeRoi, all equipment.—Sam Warren, 359 S. Industrial Blvd., Dallas, Texas, Phone RAndolph 5872.

FOR SALE—2 6-cyl. Worthington diesel 125 h.p. engines. 3 electrical generating plants with switchboards and complete for municipal light plants, slick and in extra good condition as follows: 1-240 h.p. 4-cyl. FBM cold start diesel engine with generating unit 140 k.w. 200 k.v.a. 1-215 h.p. Bruce McBeth natural gas engine with generating unit 125 k.w. 156 k.v.a. 1-165 h.p. Bruce McBeth natural gas engine with generating unit 125 k.w. 156 k.v.a. 1-40 h.p. LeRoi natural gas or butane engine with radiator for drier fan. 1-120 h.p. FBM full diesel engine complete. 1-150 h.p. Climax natural gas or butane engine.—Bill Smith, Fulwiler Bldg., Phone 4-9626 or 4-7847, Abilene, Texas.

FOR SALE—1 rebuilt 8 x 9 6-cylinder Minneapolis-Moline engine with starting equipment, natural gas or butane.—Ft. Worth Machinery Co., 913 E. Berry St., Ft. Worth, Texas.

FOR SALE—D17000 Caterpillar engine, A-1 condition. See at R. B. George Equipment Co. Dallas or write W. F. Alfrey, Hillsboro, Texas.

FOR SALE—225 h.p. continuous LeRoi natural gas engine. Perfect condition, inspected and OK.—Jonnie Bokoic, Box 114, Granger, Texas.

FOR SALE—MM Twin City 6-cylinder engine, 240 h.p., complete with driving sheave, redwood cooling tower and electric motor starting. In excellent condition and a good buy.—W. A. Morgan & Bros., Plum, Texas.

FOR SALE—Two Lennox 600,000 B.T.U. space heaters with duct-work. Ideal for heating large warehouse or office. Natural gas. $785.00 each. Five C.G.C. double X huller, cleaner, feeders, model A, Serial No. 1568. Good condition, $650.00. One 200 h.p. Hercules truck engine, $390.00. One 16 ft. Erie 100 h.p. boiler and Skinner steam engine, $1,500.00. Several vertical motors 5 to 15 h.p., overhauled and priced right.—Shawnee Peanut Co., Phone 114, Shawnee, Okla.

FOR SALE—15,000 cotton bale covers, made from used sugar bag cloth.—Sterling Bag & Burlap Co., 41 Carolina St., Buffalo, N. Y.

New Cottons

(Continued from Page 28)

(early cottons are needed for the short growing season); increased stormproofness.

Arkansas: Coarse, high yielding medium staple cottons of the Rowden type; increased verticillium wilt resistance in cottons suited to Mississippi Valley area.

Mississippi: Cottons better suited to mechanical harvesting with the spindle picker—plants of medium height with less hairy bracts and leaves, with fewer low-hanging fruiting branches, and with increased verticillium wilt resistance.

Louisiana: Basic studies of how characteristics are inherited by cotton plants from one generation to the next.

Alabama: Improved nematode- and fusarium wilt-resistance in cottons already suited to the Southeast.

South Carolina: Long staple upland cottons (1¼" or longer) with high yields and improved spinning qualities; fusarium wilt resistance.

North Carolina: Triple-hybrids with extreme luster and fiber fineness which have sufficiently high yields for profitable commerical production.

Tennessee: Cottons which mature sufficiently early as to avoid frost and weather damage.

"There is reason to believe that within the next two or three years our farmers will be growing some of the new strains planted this year at Iguala," Dr. Henry D. Barker, head of the Cotton Division of the USDA at Beltsville, Md., and chairman of the Winter Cotton Breeding Service steering committee, said.

No other U.S. farm crop has a winter breeding service comparable to that operated for cotton. Certainly none has a service which operates so efficiently.

Last year, USDA staffer Lon Lytton, who heads the Iguala operation, harvested his last lot of seed cotton on a Monday. That same day it was ginned, the seed carried to Mexico City, cleared through quarantine, and sent by air to the Georgia Experiment Station. By the following Thursday the seed were in the ground at Tifton, Ga., and another crop on its way.

Citizens of the Mexican republic look to peaceful Iguala as the site of their national independence back in 1821.

Now—one hundred thirty-one years later—in 1952, the U.S. looks to this peaceful village as the scene of some of the most important cotton developments of the century.

Grassland Congress Mails Bulletin to Cooperators

The Sixth International Grassland Congress which will be held at Pennsylvania State College Aug. 17-23 has released a bulletin which brings together all pertinent facts about the Congress.

Copies are being sent to the approximately 2,500 scientists, technicians, and grassland program cooperators who are expected to attend the Congress, including about 500 persons from the 50 or more countries that will be represented. Copies may obtained from W. R. Chapline, Sixth International Grassland Congress, Department of State, Washington 25, D. C.

From Our Washington Bureau

(Continued from Page 26)

tain—the next problem of Fair Deal Democrats is to pick a running-mate for him on the ticket. There are several "must" qualifications, according to the party chiefs.

First, he must be a loyal Fair Dealer to the core. He must be strongly pro-labor, from the big city and from the north. There is one man who seems to have all of those qualifications. He is S. Mennen Williams, governor of Michigan. He is young, ambitious, personable and a bosom friend of leaders of organized labor.

• **Big Wind Brewing**—It is spring in Washington and whatever the rest of the country may be thinking about, thoughts in the Capital turn naturally to the coming political campaign. Legislators talk legislation, but their real thoughts are far, far away.

About all Congress intends to do between now and time to go home around the first of July is to pass the appropriation bills, decide what to do about price and wage control legislation, and tune up their vocal cords for the political hustings.

Congressional debate in an election year almost always is a good indication of what the candidates expect to stress in their campaign speeches later on. Unless this year is an exception, you can expect to hear political speeches which, in order, stress:

1. Honesty, or the lack of it, in government.
2. Foreign policy, including the war in Korea and the defense of Europe.
3. Domestic policies, including prices and wage stabilization, and the seizure of the steel mills.
4. Farm programs, including price supports, grain storage, soil conservation and flood control.

There is no clear-cut division of Democrats vs. Republicans on any of the four major issues. Naturally, Republicans will place more emphasis on government scandals, and you can expect them to be moderately critical of the Administration's foreign policies.

The campaign warm-ups indicate that the sharpest division will be on domestic policies, centering around the stabilization program. Here, Republicans will charge a drift to socialism and unwarranted use of power by the chief executive. It will be argued that if the President has power to seize the railroads and steel mills, which he has, then he also has authority to put any other business or industry under government management by simply signing an order to that effect.

• **The Farm Support Issue**—Candidates seeking votes in the rural areas will, naturally, stress farm issues. Again, however, there is no clear division between where the two parties stand on what changes, if any, to make in the farm program. For that, you will have to wait until the parties adopt their platforms in July.

The Senate Agriculture Committee has been holding hearings on bills which would have the effect, generally, of boosting price supports levels. The division on the bills is at least interesting, and probably significant.

One of the high-support bills is by Sen. Young, North Dakota Republican, and the other is by Sen. Kerr, Oklahoma aspirant for the Democratic presidental nomination. Young's bill would require the Secretary of Agriculture to support all commodities for which he asked increased production at not less than 90 percent of parity.

Sen. Kerr, without Administration backing, proposes 100 percent of parity supports for nearly all farm commodities, including all the basics, plus hogs, eggs, chickens, beef cattle, wool, soybeans and dairy products.

On the committee two of the most influential members, Sen. Anderson, New Mexico Democrat, and Sen. Aiken, Vermont Republican, are working together in opposition to the Young and Kerr bills. On the House Agriculture Committee, both Chairman Cooley, North Carolina Democrat, and ranking minority member Hope of Kansas, are opposed to any changes in the support law this year.

Likewise the two most powerful farm organizations, the Grange and Farm Bureau, are opposing changes in the parity formula and the support levels. Believe it or not, so is Secretary Brannan. Only the Farmers Union among the major groups is thumping the tub for 100 percent of parity supports.

• Increasing the per acre yield, cutting production costs and growing and selling more quality nuts, will make the growing of peanuts more profitable in Texas. The 7-step peanut program, if followed, will help do the job.

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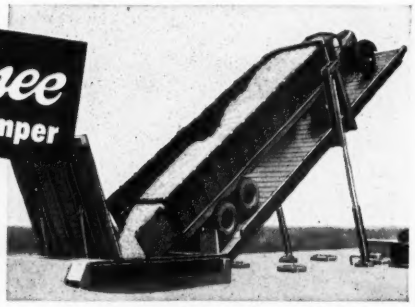

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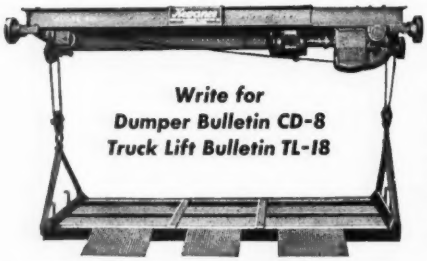

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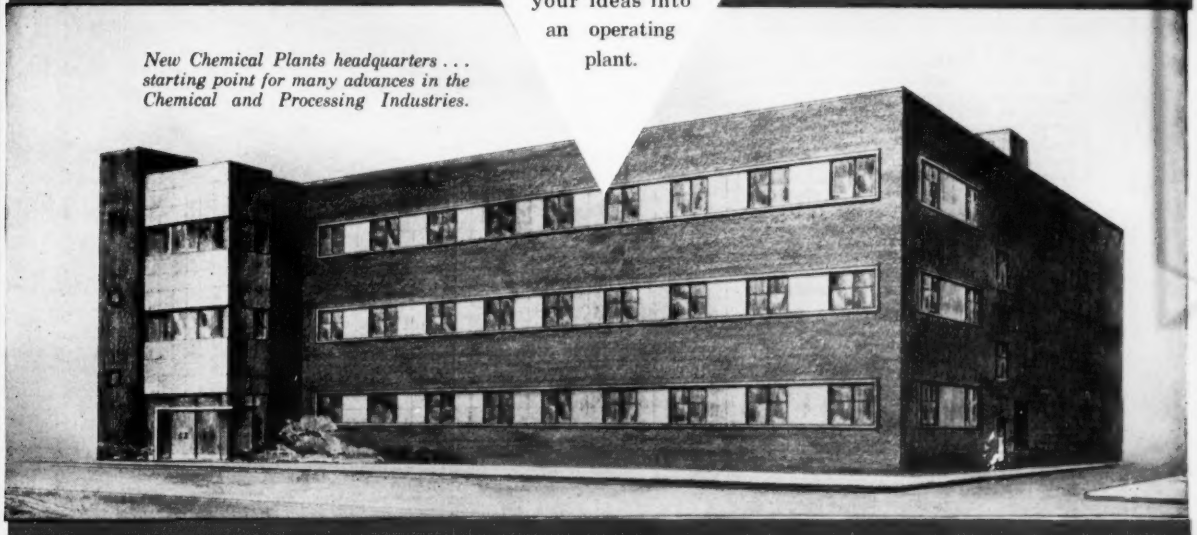

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Figure 6. An electron microscope study of the surface of a cotton fiber. Roughness is due to wrinkles like those on the surface of a raisin or prune. Magnification 17,000X.

This Thing Called Cotton

(Continued from Page 17)

Here are three reasons why immature cotton gives trouble in the mill: (1) Because the thin-walled fibers are more pliable and bend and tangle more easily, "neps" always occur with a high frequency in immature cotton. Figure 4 is a microscopic view showing neps to be bundles of immature fibers hopelessly entangled; these tight knots of fiber cannot be loosened in the ordinary mill processing of the cotton and thus cause unevenness in yarns and light spots in dyed goods. (2) Thin-walled fibers frequently do not dye as dark a shade as the normal fibers; they are harder to bleach and refuse to mercerize satisfactorily. Also, (3) they break easily and when they are present in excessive amounts the percentage of fiber lost as waste in the textile mill is unusually great.

The enormous ratio of length to width and the great range in fiber shape and size are shown in Figure 5, a portrait of a whole fiber of an American upland variety, 1¼ inch long from base to tip. The fiber is often tapered for a short length at the tip, and along the length it twists frequently, the direction of twist reversing from time to time. These twists are referred to as "convolutions." It is said that this corkscrew shape of the cotton fiber is important in spinning, for the hundreds of fibers in a yarn can "latch-on" to one another by means of the interlocking of their natural twists, and thus slip less readily on each other when twisted into a yarn. Some varieties of cotton are found to have more convolutions than others. Very thin-walled fibers have hardly any convolutions at all.

Several views under the electron microscope reveal even more strikingly the character of the individual cotton fiber.

In Figure 6 is shown a plastic cast of a small portion of the outer surface of a cotton fiber, magnified by the use of the electron microscope 17,000 times. It helps to visualize the roughness of surface that might be felt if the fiber were larger. At this magnification an average upland fiber would be about 10 inches wide and almost a quarter of a mile long. The ridges are wrinkles in the fiber caused by the shrivelling which occurred when the fiber dried out. This view of the fiber might be likened to the surface of a prune or raisin; at least, it bears the same relationship to the shape of fresh, living fiber as the prune does to the plum and the raisin to the grape.

A method of isolating the primary wall for fundamental studies was developed at the Southern Laboratory (5), in which the fiber is beaten in water in a high-speed laboratory beater so that it will slip off seasily. The photomicrograph, Figure 7, taken under the ordinary light microscope catches the primary wall slipping off like a sleeve after the fiber has been properly treated. By chemical analysis after removal, the primary wall has been shown (5) to contain wax, protein, and pectinaceous material. There is no evidence that wax is an outer coating; it seems to be closely embedded with the other materials in the network of cellulose fibrils which make up the cellulosic portion. In order to see any pattern of structure under the electron microscope all of the noncellulosic materials must first be removed by extraction with suitable solvents. Figure

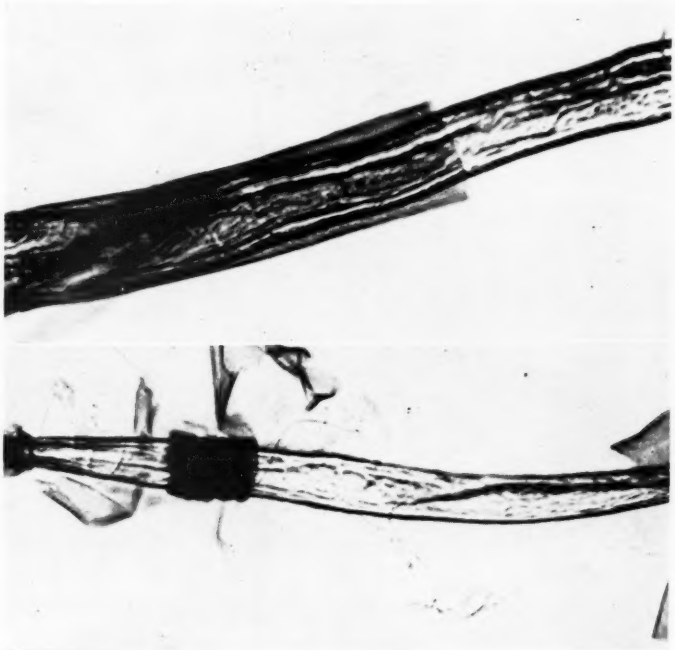

Figure 7. Outer membrane peeling from fiber surface as seen in the optical microscope. Magnification 500X.

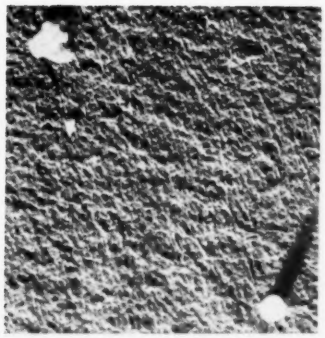

Figure 8. Electron microscope study of purified membrane. Magnification 17,000X.

8 shows the purified primary wall under the electron microscope. It appears as a felt-like mat or fabric of fine cellulose threads which are interlaced in a random fashion. The diameter of a whole cotton fiber is about 15 microns. One micron, the unit of measure in microscopy, is 1/25,000 inch. The diameters of the cellulose fibrils which compose the primary wall net-work range from about 1/40 to 1/25 of a micron.

In Figure 9 the typical structure of the growth layers shown in Figure 2 is revealed by the electron microscope. The fibrils, it is observed, are in a closely packed arrangement, all lying nearly parallel. Their diameters are about the same as those of the primary wall but they appear to be longer. It is this closely packed parallel arrangement of the material of the main body of the fiber which accounts for the tremendous strength of cotton fiber.

• **Continuing Studies**—The light microscope and the added magnifications available through the use of the electron microsope are aiding in narrowing the gap in our knowledge between the actual physical make-up of the fiber and its chemical behavior. Fundamental studies of the structure and growth of the fiber itself are necessary to understand why it behaves as it does in processing and use. The effect of opening and cleaning operations, and of spinning and weaving on the individual fiber need to be taken into account. Improvements in finishing operations such as kiering, bleaching, mercerizing and dyeing should be based on sound knowledge of how these reactions affect the fiber. It is hoped that with an understanding of the complex structure of cotton, chemists may be able to effect changes in its properties so as to tailor-make its characteristics for special purposes. For example, detailed information of this type is helping chemists to produce rot-proofed, heat-resistant, wrinkle-resistant, and flame-proofed materials from cotton. Chemical tests and examination under the microscope tells us that these modified cottons are "more than meets the eyes," although they retain much of the original shape and appearance of the natural fiber.

How these changes come about, and how they have altered the properties of the fiber are subjects of continuing study at the Southern Regional Research Laboratory. There remains much to be learned about the "architecture" of the cotton fiber before we will be able to predict how a particular treatment may change the fiber or its properties.

Nature has made this thing called cotton a remarkably strong, durable fiber with an amazing complex and variable structure. As the secrets of cotton are learned, man should be in a position to achieve more and more in the laboratory to add to the natural advantage which cotton already has. These improvements should insure the present position of cotton as the most widely used and the most versatile fiber in the world.

Figure 9. Electron microscope study of one of the inner layers of the fiber wall. Magnification 17,000X.

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• Contour farming of sloping land is a "must" if the soil is to be conserved and its productivity improved.

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Arkansas Attacks VERTICILLIUM WILT Disease of Cotton

■ GOAL IS to determine practical measures farmers can follow routinely as insurance against damage, but those in charge of program realize years of experiments will be required before recommendations for preventing loss can be made.

By MARIE L. LAVALLARD
Associate Agricultural Editor
University of Arkansas College of Agriculture, Fayetteville

THE BATTLE against verticillium wilt disease of cotton being conducted in eastern Arkansas by the Arkansas Agricultural Experiment Station is just entering its second year. Once again the research men will be watching the weather, for weather has an important part in determining how much useful information may be obtained from the work.

Verticillium wilt is favored by cool, wet weather, according to Dr. V. H. Young, head of the plant pathology department at the University of Arkansas and director of part of the research. In most years, when the summer is warm and dry, cotton farmers don't realize the disease is present in their fields because only a few plants are attacked, and none seriously. That was the case last year.

In 1950, however, conditions were ideal for the wilt, and it caused a loss of several million dollars in the state. That touched off the present research study, which is centered on six acres of land just west of Osceola. The land, part of a field that was especially hard hit by wilt in 1950, was made available by farmers in the area through the efforts of County Agent D. V. Maloch.

• **A Four-Fold Program** — The research program has four main objectives, Dr. Young reports. These are (1) a survey to determine the incidence and distribution of the disease in the state, (2) a study of its relation to weather conditions, (3) the development of resistant varieties, and (4) the effect of soil environment (that is, cultural and fertilization practices) on its severity.

Although it is known that verticillium wilt is present in most counties, especially in severe years, the disease is favored by soils low in sand; that is, in the heavier-textured soils, Dr. Young points out. Consequently it has so far been of importance only in the Delta counties in northeastern Arkansas, especially Mississippi and Crittenden. As has already been stated, it is severe in years of low temperature and high moisture, but mild in hot years, or in hot periods when recovery from the disease usually sets in.

Two acres of land were devoted to tests of varietal resistance in 1951, and even more will be used for the breeding work this year, according to Dr. J. O. Ware of the agronomy department, who is in charge of that phase of the work. Last year varieties gathered from many parts of the world were planted, and B. A. Waddle, also of the agronomy department, spent a good deal of time selecting varieties and plants that showed signs of wilt resistance. Many such plants were selfed. Some of these selections were sent to Mexico for propagation last winter, and will be planted at Osceola this spring, thus cutting in half the time usually required for such work. Even so, it will take some time to develop varieties combining wilt resistance with other characteristics such as high yield, quality, and earliness.

• **Injury to Roots Favors Wilt**—The remainder of the experimental area is devoted to studies on effect of environment. One of the factors studied last year was the effect of depth of cultivation. Results obtained, combined with previous studies on the effect of wounding, indicate that any type of cultivation that disturbs the root system of the cotton plants tends to increase the amount of wilt and, to a limited extent, decrease yields. Thus an effective system of chemical weed control, eliminating the need for regular methods of cultivation, would probably be of advantage in years in which weather favored wilt.

Unfortunately, most of the other cultural practices that were found to reduce wilt in last year's work also reduced yields. Thus, late planting resulted in less wilt in 1951, but it also reduced yields. Also, very thick stands showed less wilt, but they yielded less than normal stands.

Low fertilization, use of no fertilizer at all, and fertilization with non-nitrogenous materials gave the lowest amount of wilt; they also gave the lowest yields and the lowest percentage of earliness. High fertilization with nitrogen alone (ammonium nitrate, ammonium sulphate, cyanamide, and sodium nitrate were used) gave the highest yields and a high percentage of earliness, but resulted in highest incidence of wilt. Use of high organic fertilizers (alfalfa meal and stable manure) gave negative results. There was one bright spot in the fertilizer picture, however; complete fertilizers high in nitrogen looked very promising from all three standpoints of yield, earliness, and resistance to wilt.

• **High Beds Gave High Yields** — One other practice tested in 1951 was the use of high beds, sometimes known as "cantaloupe beds" in the West. Such beds provide for better drainage of the plant rows. In states such as New Mexico, it has been found that high beds result in high soil temperatures, which reduce wilt damage. In the Arkansas work, the high beds did not result in higher soil temperature and did not reduce the incidence of wilt, but they did hasten maturity and resulted in one of the highest yields in the test.

These cultural studies will be continued in 1952, but will be expanded by about 25 percent. In addition, some soil fumigiation tests will be begun, and also studies on the effect of green manuring, with vetch.

James F. Jacks, junior agronomist with the Experiment Station who is located at the Eastern Arkansas Alfalfa Substation at Osceola, will direct the field work as laid out by Doctors Young and Ware on the 6 acres of land at Osceola. Jacks will visit the plots frequently and record the effects of the various practices. Waddle will continue with the field work in selection of plants and breeding. In addition, a limited amount of work will also be done in scattered areas in Mississippi County, and at the Main Experiment Station at Fayetteville.

• **Standard, Routine Practices Needed**—Since there is no way for farmers to tell in advance what the weather will be during the summer, it would be ideal for cotton farmers in susceptible areas to have practical, economical measures they could follow routinely as insurance against damage by verticillium wilt disease. That is the goal of the program, but it is expected that these and other experiments will need to be conducted for several years before recommendations for preventing loss can be made, Dr. Young warns. It is especially difficult to draw conclusions in summers such as in 1951, when the weather was favorable for cotton and most unfavorable for wilt. A cool wet summer in 1952, while not benefiting cotton production in general, would be of real help in this study.

New Variety of Soybeans Available in Brazil

A new variety of soybeans is now available in the state of Sao Paulo, Brazil, which will yield 18-24 bushels per acre when well inoculated and planted on well-limed soil. According to reports to USDA, a fair supply of the seed is available for planting and the soybean area will be greatly expanded.

Soybeans have been grown in Sao Paulo for about 30 years, following introduction by the Japanese and by the Institute Agronomico. Yields have been comparatively low and many varieties were unsuccessful. About 3 years ago, because of the shortage of vegetable oils in Sao Paulo and the need for a legume to grow in rotation with cotton, a special effort was made to develop this high yielding variety resistant to disease and nematodes.

Brazilian soybean production is centered in Rio Grande do Sul, and output has expanded rapidly in that state during the past few years. From around 25,000 bushels in the early 1940's, production increased to 100,000 bushels by the mid-1940's and the 1949-50 crop passed the million mark. In 1950-51 Rio Grande do Sul's crop nearly doubled and exceeded 2 million bushels. A further increase is expected there for 1951-52.

Flood Control Authority

Feringa to Address Delta Council Meet

■ THIRD NOTABLE accepts invitation to speak to group along with Gov. James F. Byrnes of South Carolina and William Faulkner, Mississippi author.

Brig. Gen. Peter A. Feringa, president of the Mississippi River Commission, is the third notable to accept an invitation to address a Mid-South audience at the seventeenth annual meeting of Delta Council. Gen. Feringa will speak to the assembly during the morning session of the May 15 meeting at Delta State Teachers College in Cleveland, Miss.

Already accepting invitations to speak at the Delta Council gathering have been Gov. James F. Byrnes of South Carolina and Mississippi's Nobel Prize winning author, William Faulkner, of Oxford.

Delta Council President Maury Knowlton, in making announcement of Gen. Feringa's acceptance, said that W. T. McKinney of Anguilla, Miss., will introduce the flood control authority. McKinney is a past-president of Delta Council and chairman of the Council's Flood Control Committee.

Gen. Feringa's career with the Army and the Corps of Engineers has been a long and brilliant one. While still a sophomore at Lehigh University, he enlisted in the 7th New York National Guard Regiment, which became the 107th Infantry, 27th Division at the beginning of World War I.

He served with the 107th both in the U.S. and in France, until he returned in 1919. He then finished his college career at Lehigh University, being graduated there as a civil engineer. Shortly after graduation he was commissioned in the Corps of Engineers and has remained with the Corps ever since.

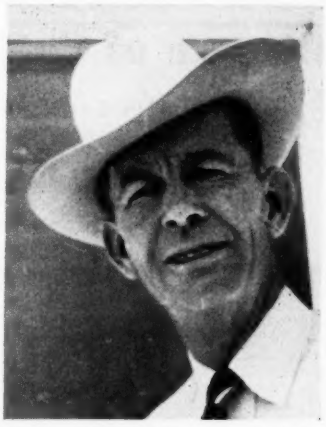
Gen Feringa has had experience as district engineer in several Engineering Districts and in the Office, Chief of Engineers, where his job was assistant chief of engineers for civil works.

During World War II he served overseas in the European Theater. He is now president of the Mississippi River Commission, headquartered at Vicksburg, Miss. He assumed that position in January, 1949.

The three speakers accepting for the 1952 meeting uphold Delta Council's tradition of presenting outstanding speakers to its membership. In past years speakers have included such notables as Dean Acheson, than Undersecretary of State, who first outlined the Marshall Plan in his Delta Council address.

O. V. Wells, chief of the Bureau of Agricultural Economics, and N.B.C. Commentator Richard B. Harkness spoke to the 1948 meeting. John Duncan Miller, chief of the London Times Bureau and Secretary of Agriculture Charles F. Brannan were the speakers the following year.

In 1950, David L. Cohn, Delta-born author and lecturer, and U.S. Senator Harry F. Byrd were the guest speakers. Last year, Delta Council members heard Dr. Benjamin Cohen, now U.N. ambassador in Korea, and Nebraska's Gov. Val Peterson.



Heads Friona, Texas, C of C

WRIGHT WILLIAMS, of the North Plain's Gin Co., Friona, Texas, has been elected president of the Friona Chamber of Commerce and Agriculture. D. C. Herring of the Herring Implement Co. is vice-president, and Weldon Dickson of the Friona Lumber Co., treasurer. Regular meetings have been set for the second Tuesday of each month at 8 p.m.

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Weed Control

Chemical Herbicides Found Practical

■ NEW RECOMMENDED herbicides applied with improved equipment and techniques control weeds satisfactorily and have not reduced yields.

The control of weeds by chemicals is one of the most important recent advances in agriculture, according to Dr. E. S. Hagood of the Georgia Experiment Station.

Some of the new chemical herbicides, applied with improved equipment and techniques, have been found to be both practical and economical.

The cost and scarcity of labor for work in cotton fields was a large factor in bringing about present studies. Many such studies have indicated that the cost of the herbicidal program is less than the conventional method of hand hoeing. The recommended herbicides have controlled weeds satisfactorily and have not reduced yields.

In pre-emergence control of weeds, the residues from the previous crop should be disposed of thoroughly, Dr. Hagood points out. Seed beds should be of a uniform height and width, and should be prepared before planting. Fertilizer should be placed at bedding time so as to have a firm seed bed for planting. The surface of the bed should be lightly stirred at planting, and cotton should preferably be hill-dropped one inch deep.

A roller, mounted in place of the press wheel of the planter or to the rear of the tractor, smooths the row over a 12-inch band. A nozzle of the fan-type is mounted behind the roller, adjusted to spray a 10 to 12-inch band, centered on the row. This band application of spray material lowers the costs of the chemical. If ten inches of each 40-inch row is sprayed, then the chemical cost would be one-fourth of that required to completely cover an acre. If a 10-inch band is sprayed, 10 gallons of the pre-emergence solution is recommended per acre.

The dinitro types of herbicides are presently recommended as the best for pre-emergence treatment of cotton. These are formulated as either water-soluble or oil-soluble compounds. Present data indicates that the water-soluble form is as effective as the oil-soluble one. Commercial dinitros should be diluted according to the manufacturer's recommendations.

Applications of this type should prevent weed seed germination for four weeks. Weather conditions will influence the length of this effecive period. Generally, weather conditions which are favorable for cotton growth are ideal for chemical weed control. Dry weather usually lessens the degree of success of the herbicidal treatments. Under very wet conditions, pre-emergence treatment gives the cotton a chance to grow without weed competition.

Present recommendations call for up to three post-emergence oil applications. Each application is applied at the rate of five gallons per acre of 40-inch rows, when an 8-inch band is sprayed. The oil is applied using a parallel-action shoe or a special fender on both sides of the row. A fan-type spray nozzle is mounted on this shoe or fender and is directed so that the spray strikes the cotton stems about an inch above the ground. Care must be taken not to wet the cotton foliage with these sprays. Oil applications give effective control of weeds and grasses when they are under an inch in height. Cotton should be at least three inches tall at the time of the first application.

Succeeding applications should be made as needed but should not be less than five days apart. These oil spray applications should be made at the same time the middles are plowed. The farmer should plow in such a way as not to throw any dirt on the sprayed area.

There are many unanswered questions and limitations in any chemical weed control program. Research is underway to help answer these questions.

Final Plans to Be Made for Cotton Research Congress

Arrangements for the 13th annual Cotton Research Congress sponsored by the Statewide Cotton Committee of Texas will be completed at a committee meeting May 1 in Houston, Burris C. Jackson, Hillsboro, Texas, general chairman, has announced.

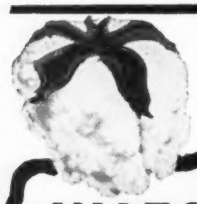
The 1952 Congress will be held June 19-21 at the Rice Hotel in Houston.

Preliminary plans call for extensive exhibits, panel discussions of current industry problems, tours and addresses by national cotton leaders. Houston industry and civic leaders are cooperating in planning special features for the meeting.

Belgian Congo Estimates Larger Cotton Crop

The 1951-52 cotton crop in northern Belgian Congo, with picking recenetly completed, is estimated at about 119,000 bales (of 500 pounds gross), about 20 percent above the previous season's crop of 99,000 bales.

The southern crop, with picking to begin in June, is expected to be about normal (100,000 bales), giving a total 1951-52 production in the Belgian Congo of 220,000 bales, compared with the 197,000 bales produced in 1950-51.



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FERRIS WATSON SEED CO.

GARLAND • Dallas County • TEXAS

Built in 1798

THIS ANCIENT press, although 154 years old, is in near-perfect condition. It is owned by J. Calhoun Hayes and stands on his farm near Latta, S. C.

Reminder of Bygone Days

IN THE HEART of the early-day cotton country of the U.S., stands an ancient cotton press, one of the last symbols of the days when cotton farming was done entirely by hand—from the dropping of the seeds to the ginning and wrapping of the finished product. The press is made almost entirely of wood and although built in 1798, it is in near-perfect condition and was actually used to press a bale of cotton in 1949. The builder, Henry Berry, was the great grandfather of the present owner, J. Calhoun Hayes.

It is located on the 400-acre Hayes farm near Latta, S. C. U.S. Highway 501 goes right through the farm within a few yards of the old press and tourists frequently stop to take pictures, gape at the old relic, and trample the surrounding cotton. Many who stop are not aware, of course, that they are in a cotton field unless it is open and ready for picking.

Everything else on the farm is as modern as the press is ancient. Hayes' home is one of the finest for miles around. The ground around the press is tracked by modern farm machinery, and airplanes fly overhead dusting cotton in nearby fields. Some tobacco and grain are grown by Hayes, but cotton is still king.

The press is about 30 feet high and the two beams extending from the top to the ground are about 40 feet long, each hewn from a single timber and covered with cypress shingles for weather protection. After being hand picked, cotton was separated from the seeds by hand and the lint cotton packed in the strong wooden box at the base. The huge wooden screw, 16 inches in diameter and 14 feet long, was then turned to compress the cotton to bale size.

Power was supplied by turning the ends of the beams with either men or mules. Bales were held together by iron bands similar to modern-day bale ties. Iron hinges on the wooden press box were hand wrought.

Time required for turning out a finished bale of cotton in those days was about one and half hours, excluding time spent removing seeds by hand.

Boll Weevil Hibernation In Georgia in 1951-52

By C. M. BECKHAM and MINTER DUPREE
Georgia Experiment Station, Experiment

ALTHOUGH unusually large numbers of boll weevils did not go into hibernation last fall, live weevils have been found in four areas examined in the state. According to spring counts, 75 percent of the weevils that went into hibernation survived the mild winter. This was shown by a survey recently completed by the Entomology Department of the Georgia Experiment Station.

The examinations further showed an average for the state of 1,244 live weevils per acre of surface trash from woods. More weevils were found in the central part of the state than in the north or south. In two widely separated counties in the Coastal Plain, Burke and Tift, an average of 1,839 and 629 weevils were found, respectively. Examinations in several Piedmont counties, Spalding, Pike, and Fayette, showed an average of 2,217 live weevils. An average of only 97 was found in Gordon County in the Limestone Valley area.

A count on one farm in Burke County showed 6,292 live weevils per acre. Two farms in Spalding County had more than 4,000 live weevils per acre of surface trash. Since this is the first year that these examinations have been made in Georgia, there are no previous records available for comparison. However, in comparison with past records from other states, these figures are relatively high. Georgia records will be more valuable after examinations have been made for several years.

Live weevils were found on 18 of the 21 farms examined. Eighty-six percent of the farms examined were infested.

These figures are based on examinations of samples of surface trash taken from woods adjacent to old cotton fields. This method of sampling represents the approximate number of weevils in hibernation and should not be confused with population counts of boll weevils on seedling cotton. A sample consisted of two square yards of surface trash, pine straw, leaves, and other cover in which weevils hibernate. A total of 10 samples or 180 square feet were taken from each farm. The samples of trash were run through a shaking machine in the laboratory. By passing over several sized screens, the quantity of trash was reduced to a small amount in order to facilitate finding any weevils present.

The percent survival is based on a comparison of examinations made in the fall and spring. Fall samples were collected and examined from Nov. 19 to Dec. 13, 1951, soon after weevils had entered hibernation following cool weather. Samples were obtained from the same farms during the spring from March 11 to 31, 1952. Spring collections were made before weevils had emerged from hibernating quarters.

These data show that the number of weevils varies considerably on different farms. It is, therefore, important for the individual grower to keep close check of his own field during the growing season. Figures presented here indicate only the number of weevils in hibernation, based on a limited number of examinations. Subsequent counts will be made during May and June on seedling cotton to determine the weevil population emerging from hibernation. It should be recognized that weather conditions pre-

Spring Surface Trash Examinations for Live Hibernating Boll Weevils in Georgia, 1952

County	Area in State	No. Samples	Average Live Weevils Per Acre	Survival
			number	percent
Gordon	Northwest	50	97	50
Spalding	North Central	60	2,217	67
Fayette				
Pike				
Burke	East Central	50	1,839	93
Tift	South	50	629	82

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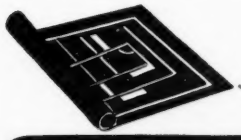

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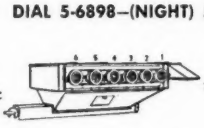
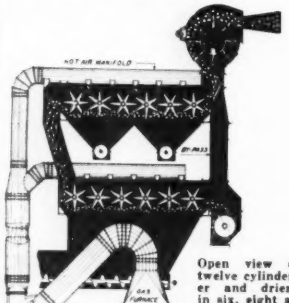


STACY COTTON CLEANER AND DRIER



Open view of our twelve cylinder cleaner and drier. Also in six, eight and sixteen cylinders. The gas furnace and hot air fan can be placed anywhere in the gin.

A careful study of the open view cut at the left will convince any ginner of the effectiveness of the Stacy Cotton Cleaning System and Drier. Note the hot air is blown through the cotton by a series of nozzles (similar to the air blast nozzles on a gin stand), forcing the dirt, leaf trash, and stems through the screen. The moist air does not follow the cotton.

The cleaner is used every day you gin. When a wet bale comes in—turn on the heat. There is no dead investment. We furnish Heaters for natural gas, butane and propane.

Closed view of our eight cylinder cleaner and drier.

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vailing during the summer months have a greater influence on the amount of damage caused by the boll weevil than does the relative numbers which survive hibernation.

It should not be implied from this study that woods should be burned. Burning the woods is not recommended because factors other than the boll weevil should be considered. Since boll weevils hibernate in so many places, only a few are destroyed in this manner. The adult weevil winters in all kinds of shelter; under dead leaves and piled cotton stalks, in Spanish moss on trees, under loose bark, about gins and barns, along fences, and in many other protected places.

Visits Research Centers

GARLON A. HARPER, assistant in nutrition for the NCPA Educational Service, Dallas, visited three leading centers for research with cottonseed products on a recent field trip. He attended the Oklahoma A. & M. College Experiment Station feeders' day at Stillwater, visited the USDA Southern Great Plains Field Station at Woodward, Okla., and attended the field day at Texas Technological College, Lubbock.

Turkey's Cotton Production Estimated at 712,000 Bales

The 1951-52 cotton crop in Turkey has been estimated at 712,000 bales (of 500 pounds gross), following a survey of the principal producing regions by a group of government representatives, according to reports to USDA. Earlier estimates of the current season's crop ranged from about 630,000 bales to as high as 780,000 bales. The latest estimate of the 1951-52 crop is about 31 percent above the 542,000 bales produced in 1950-51.

Exports of cotton from Turkey in the period Aug. 1, 1951, to Feb. 15, the only period for which statistics are available, totaled only 133,000 bales compared with exports of 320,000 bales during August through February 1950-51. During the current season about 74 percent of exports, or 98,000 bales, have been shipped to Western Germany, with 10,000 bales exported to Czechoslovakia and smaller quantities to France and the United Kingdom.

U.S. Exports 588,000 Bales Of Cotton in February

Exports of cotton from the U.S. in February totaled 588,000 running bales, including the following destinations and amounts: India, 152,000 bales; Italy, 79,000; United Kingdom, 74,000; Japan, 72,000; Germany, 44,000; Canada, 28,000; Belgium, 18,000; France, 16,000; Formosa, 16,000; Yugoslavia, 14,000 and the Netherlands, 10,000. U.S. exports of cotton linters in February totaled 32,000 running bales, including 14,000 to the United Kingdom, 6,000 to France, 5,000 to Germany, 4,000 to Japan, 1,000 to Canada and 1,000 to Switzerland.

• There are 2,000,000 4-H club members in the U.S. in 87,000 clubs led by 275,000 local volunteer club leaders.

QUOTES on Cotton

Prepared by the Educational Service, National Cottonseed Products Association, Dallas

SURE THING—"One thing is certain; there is need for insect control every year. The cotton farmer who faces this fact and includes insect control in his regular farming routine will be rewarded with increased yields of a higher-quality product." — Avery S. Hoyt, Chief, U.S. Bureau of Entomology.

•

TWO GREAT OIL INDUSTRIES—"There are two great oil industries. The oil we pump from the ground is a depleting industry. The other is the growing of oilseed crops by farmers. When and if oil derricks crumble, we expect the vegetable oil business to be going stronger than ever."—"The California Farmer."

•

MORE MONEY IN CIRCULATION—"Cotton, because of its production cost, places from $75 to $100 more money in circulation per acre than any other crop."—S. Crews Reynolds, Missouri Cotton Producers Association.

•

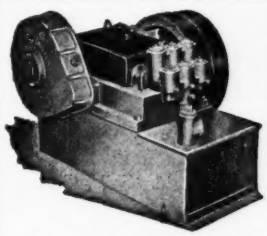
GINNERS HELP — "The excellent quality of Lincoln County cotton in 1951 was partly due to the fact that most gins have installed improved ginning machinery in recent years."—Arkansas Extension Service Report.

•

DO NOT HAVE TO WAIT—"Mechanical cotton production can be adopted as fast as practical methods are found. It is not necessary to wait until the whole job can be done by machines. The real question is finding low-cost production methods. Machines are just one way of cutting costs."—Oklahoma Experiment Station Bulletin.

•

COTTON COMES FIRST—"Cotton and cattle make a good combination, but cotton comes first."—Ed Lester, Louisiana Cotton and Livestock Farmer.



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"It's Cotton Time"

Stores Make Plans For Cotton Week

■ **THOUSANDS of retail outlets have ordered Cotton Time posters and streamers to promote National Cotton Week, which will be May 12-17.**

Stores in key cities are planning "Cotton Time" promotions for National Cotton Week May 12-17, according to the National Cotton Council.

Retailers in Los Angeles, Salt Lake City, Chattanooga and other major markets are developing storewide promotions around the Cotton Week slogan, "It's Cotton Time." Requests for display kits and sales promotion programs have been received from all 48 states, the District of Columbia, Hawaii, Canada, Cuba and Sweden.

Members of the Los Angeles Miracle Mile Association — representing merchants on Wilshire Boulevard — will dramatize the story of cotton from plant to finished prduct in store-to-store window exhibits. Several downtown department stores plan similar promotions.

An Arizona Cotton Week program will have civic and merchandising impact in Phoenix and nine other cities. Participating are the Arizona Cotton Growers Association, retailers, newspapers, radio stations and allied industry groups. Cotton Week will be highlighted in window displays, interiors and store advertising.

Thousands of retail outlets have ordered Cotton Time posters and streamers, with orders running about 50 percent ahead of 1951. Among the first to participate have been retail chains like Butler Brothers, Sears Roebuck, W. T. Grant, J. C. Penny, H. L. Green, McCrory Stores Corp., Rose's 5-10-25¢ Stores, Scott-Burr Stores and Rice-Stix.

"All signs indicate this will be the biggest Cotton Week on record," said Paul M. Jones, Council sales promotion manager. Last year 2,000 stores in 46 states participated, a record up to that time.

Many agricultural centers will celebrate with "Cotton Appreciation" programs proclaimed by governors and mayors. These programs include cotton festivals, balls, fashion shows, club programs, school exercises and community trade days—jointly sponsored by merchants and farm groups.

The Memphis Cotton Carnival, coinciding with Cotton Week, will open on May 13 with the arrival of the King and Queen of Cotton—members of prominent Memphis families—aboard a lavish royal barge. Next day Miss Patricia Ann Mullarkey of Dallas, 1952 Maid of Cotton, will report on her international tour at a Carnival fashion show.

The National Grange will provide its 7200 local Granges in 37 states with Cotton Time program guides including games and contests for meetings based on the story of cotton.

Leading women's magazines are featuring cotton fashions in April and May issues. Network radio programs sponsored by soap manufacturers are developing Cotton Week spot announcements. Washing machine distributors are planning to display Cotton Week posters. Some 20,000 Cotton Time cards have been issued for display in buses and streetcars of more than 200 cities. Seventy thousand Cotton Week plan books have been issued to retailers.

• Dairy cow numbers in the U.S. decreased 12 percent in the last four years.

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GIN SUPPLY DEPARTMENT

The Cotton Gin and Oil Mill Press

3116 Commerce St. P.O. Box 444 Dallas 1, Texas

Bauer Representative's Territory Defined

In announcing the appointment of J. A LeVan as a new sales representative in the March 29 issue of The Cotton Gin and Oil Mill Press, The Bauer Bros. Company implied that he would handle the sale of cottonseed machinery in Texas, Louisiana, and Arkansas. Bauer Bros. is currently represented in Texas and the Southwest for the sale of cottonseed machinery by C. C. Cantrell of Fort Worth, with some assistance from W. C. Cantrell who is currently working from the company's office in Springfield.

LeVan's territory embraces southern Georgia, Alabama, Mississippi, and Louisiana for the sale of cottonseed machinery, and the area west of the Mississippi River for the sale of pulp and paper machinery.

Research BRIEFS

Inventors Still Busy

■ Every once in awhile it's fun to round up the latest patents issued in Washington for new inventions. Some humdingers were put on the patent list the other day. They include a "device to part the hair of the human head in a simple and effective manner." Saves time and labor, says the inventor. Other new gadgetry includes a magnetic necktie holder and a pocket "handkerchief" that isn't a handkerchief at all, but seems to be. Still another patent has been issued for a device that permits a farmer to clasp the near hind leg of the cow so that she won't kick while being milked. And here's the one you may have been looking for: a headrest to be used in the bathtub (Patent No. 2,592,160).

Aging Workers Unite

■ Comes news for the young sprouts who think they can do the job better than the old man. Recent tests made by the Federation Employment Service in New York City show that people between 40 and 60 years of age work as well or better than younger persons.

New Barley for South

■ Scientists at the Agriculture Department's big research farm in Beltsville, Md., are enthusiastic about a new barley that has been tested thoroughly in Texas. They think it may have special value as a winter forage crop, as well as merit in grain production. The new barley, called Goliad, produced more forage than standard varieties of both wheat and oats in the experiments. It appears to be suitable either as a dryland crop or an irrigated one. Grain yields of the new barley averaged approximately 31 bushels to the acre.

Fire-Resistant Textiles

■ Researchers at Columbia University in New York City are looking for treatments that will make textiles resistsant to fire. They already have found one that reportedly holds great promise. The procedure calls for soaking the fabric in a solution of polybromoallyl phosphate, then submitting the cloth to a heat treatment that "fixes" the phosphate in the material.

New Brucellosis Test

■ There is a new test being developed for detection of the dread brucellosis diseases in cattle that could be a major boon to southern dairymen. It is thought that the new "milk plate" test, as it is called, may prove superior to the present so-called ring test. Reason is that it permits the disease to be traced to individual animals infected while the ring test detects brucellosis only in the herd. Thus far, the new test has been tried only in the laboratory, but field tests are now being scheduled. USDA researchers hope to have a definite answer in July as to whether the new method is better than the older ones. If their hopes are realized, the results will be a boon to man as well as animal, since undulant fever in human beings is passed along by cattle infected with brucellosis.

Diet and Mechanization

■ There is a connection between mechanization on the farm and diet, say USDA nutritionists, perhaps straining a bit for a new angle. Anyhow, they point out that mechanization means you need fewer calories, because, naturally, there is less manual work to do. Another reason pointed out by the diet experts for eating fewer calories is the fact that the average American is living longer—and older folks need fewer calories than younger people. The point the nutritionists are making is not a new one: everything else being equal, they are simply recommending fewer high-calorie foods such as sweets for most people.

Sabotage on U.S. Farms?

■ Behind the scenes these days in Washington livestock researchers are doing a lot of worrying about the possibility that some unfriendly nation may attempt to sow disease among U.S. herds and flocks. It wasn't advertised, but the FBI was called in to investigate for any evidence of sabotage in the recent outbreak of anthrax among hogs and cattle. A report is now being prepared by the USDA's Bureau of Animal

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Industry that spells out what ought to be done by farmers and others in case of biological warfare against U.S. farms and ranches.

Speaking of Mink . . .

■ It may be anti-Democratic to talk about mink during this political season, but Administration researchers recently had something to say about it, just the same. They point out that the fur trade will be happy to learn that it now has been proved that platinum and steelblu mink will always produce sapphire mink. Sapphire, it seems, is much more profitable than most other mink.

Viewing with Alarm

■ The nation's clothiers, following research surveys, are viewing with alarm the apparent tendency of men to buy fewer clothes. The studies show that approximately 20 percent less of the consumer dollar is going for men's clothing today than was the case about 20 years ago.

Texas Flood Control

■ The USDA is asking Congress for approval of a project for flood control in the vast, 40,000-acre Brazos area of Texas that would cost an estimated amount of almost $110 million. The proposal, based on research studies, calls for $69 million in federal funds. Landowners, the state, and local governments would pay for the rest.

A. L. Story Elected Head Of Missouri Producers

A. L. Story, new president of Missouri Cotton Producers Association, was elected to serve as president for a one-year term at the annual meeting of MCPA in Kennett, Mo., April 2. He was born at Charleston, Mo., graduated from public schools at Charleston, and attended the University of Missouri.

He is associated with his father, E. A. Story, and two brothers in a general farming operation in Mississippi County. This operation includes a cotton gin and an alfalfa dehydrating plant. In addition to his farming operation, Story is president of the S. & S. Grain and Storage Company of Charleston, Mo. He is chairman of the Missouri-Illinois Unit of the National Cotton Council and a member of the Southeast Missouri Council of Boy Scouts of America.

Story is a thirty-second degree Mason, a Shriner, and a member of Official Board of the Methodist Church and the Kiwanis Club of Charleston. He is also a member of the St. John Levee and Drainage District Board.

First vice-president of the MCPA is Emerson Smith, Caruthersville; second vice-president, W. P. Hunter, Sikeston; third vice-president, Harry Campbell, Lilbourn; secretary-treasurer, Jim Dick Killion, Portageville; executive vice-president, Hilton L. Bracey, Caruthersville.

French Equatorial Africa Expects Big Cotton Crop

The 1951-52 production of cotton in French Equatorial Africa is expected to result in a record crop of about 140,000 bales (of 500 pounds gross), somewhat above earlier estimates of 115,000 bales, and considerably higher than the 1950-51 crop of 93,000 bales.

CALENDAR

Conventions · Meetings · Events

• April 28-29-30, 1952 — American Oil Chemists' Society spring meeting. Shamrock Hotel, Houston, Texas. William Argue, Anderson, Clayton & Company, Cotton Exchange Bldg., P. O. Box 2538, Houston 1, Texas, general chairman.

• May 12-13 — Oklahoma Cottonseed Crushers' Association annual convention. Lake Murray Lodge, Ardmore, Okla. J. D. Fleming, 1004 Cravens Bldg., Oklahoma City 2, Okla., secretary-treasurer.

• May 15 — Delta Council seventeenth annual meeting. Delta State Teachers College, Cleveland, Miss. B. F. Smith, Stoneville, Miss., secretary-manager.

• May 19-20-21 — National Cottonseed Products Association annual convention. Roosevelt Hotel, New Orleans, La. S. M. Harmon, Sterick Bldg., Memphis 3, Tenn., secretary-treasurer.

• May 26-27-28 — Fifty-eighth annual convention, National Oil Mill Superintendents Association. Rice Hotel, Houston, Texas. H. E. Wilson, Wharton, Texas, secretary-treasurer.

• June 1-2-3—Texas Cottonseed Crushers' Association, fifty-eighth annual convention. Shamrock Hotel, Houston, Texas. Jack Whetstone, 624 Wilson Bldg., Dallas 1, Texas, secretary.

• June 2-3—Sixth joint annual convention, Georgia Cottonseed Crushers Association and Alabama-Florida Cottonseed Products Association. The General Oglethorpe Hotel, Wilmington Island, Savannah, Ga. J. E. Moses, 318 Grand Theatre Building, Atlanta 3, Ga., secretary of Georgia association; T. R. Cain, 310 Professional Center Bldg., Montgomery 4, Ala., secretary of Alabama-Florida association.

• June 3-4-5—Tri-States Oil Mill Superintendents' Association annual convention. Hotel Buena Vista, Biloxi, Miss. L. E. Roberts, 998 Kansas, Memphis 5, Tenn., secretary-treasurer.

• June 8-9-10-11—North Carolina Cottonseed Crushers Association-South Carolina Cotton Seed Crushers' Association joint annual convention. The Cavalier, Virginia Beach, Va. Mrs. M. U. Hogue, P. O. Box 747, Raleigh, N. C., secretary-treasurer, North Carolina association; Mrs. Durrett Williams, 609 Palmetto Bldg., Columbia 1, S. C., treasurer, South Carolina association.

• June 12-13 — Mississippi Cottonseed Crushers Association annual convention. Hotel Buena Vista, Biloxi, Miss. J. A. Rogers, Jackson, Miss., secretary.

• June 16-17-18 — Cottonseed Oil Mill Operators Short Course. Texas A. & M. College, College Station. For Information, write Dr. J. D. Lindsay, Director, Institute of Oilseed Technology, College Station, Texas.

• June 19-20-21—Cotton Research Congress. Rice Hotel, Houston, Texas. Sponsored by Statewide Cotton Committee of Texas. Burris C. Jackson, Hillsboro, general chairman.

• Sept. 9-10—American Soybean Association, thirty-second annual convention. Purdue University, Lafayette, Ind. Geo. M. Strayer, Hudson, Iowa, secretary-treasurer.

• October 22-24—Sixth Annual Beltwide Cotton Mechanization Conference. Bakersfield and Fresno, Calif. For information write: National Cotton Council, P. O. Box 18, Memphis 1, Tenn.

. . . . that give your chemicals full killing power . . . and safety

Accessories Mfg. Co.

724 McGee St., Kansas City, Mo.

STEEL HAND TRUCKS

For Gins, Oil Mills and Compress Operations

LONG REACH MACHINE WORKS

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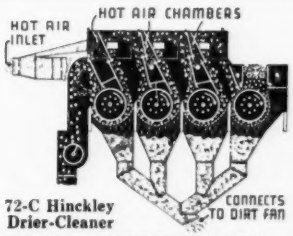
HINCKLEY

Gin Supply Co., 4008 Commerce
Dallas 1, Texas

A Hinckley Drier-Cleaner makes a smooth, clean sample. It blows the fine pin trash out. It increases your turn-out.



72-C Hinckley Drier-Cleaner

HINCKLEY GIN SUPPLY COMPANY

4008 Commerce St. Dallas 1, Texas

2 National Favorites!

Wesson Oil

Preferred for America's Salads. . . . More popular every day for Stir-N-Roll pastry and biscuits!

Snowdrift

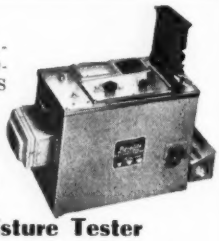
Pure vegetable shortening . . . Emulsorized for quick-method cakes . . . makes digestible, good-tasting fried foods.

WESSON OIL & SNOWDRIFT SALES COMPANY

NEW YORK — NEW ORLEANS — SAVANNAH — SAN FRANCISCO — HOUSTON — CHICAGO

THREE EXCLUSIVE ADVANTAGES OF THE

Seedburo
Steinlite



Moisture Tester

Steinlite is the only 60 second moisture tester that preserves the sample, requires no strong-arm pumping, no tedious scraping out of sample dish.

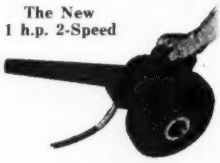
More Steinlites are used by Cotton and Soybean men than all others added together. Write for booklet.

SEEDBURO Equipment Company

739 Converse Building, Chicago 6, Illinois

TRY IT—FREE

The New
1 h.p. 2-Speed



ACE GIN BLOWER

To prove that the ACE Gin Blower

Cleans faster and better
Reduces fire hazards
Prevents overheating
Saves time and labor

We will send one for FREE TRIAL.

Write for details. No obligation.

The Ace Co.

114 W. Washington St., Ocala, Fla.

MODERN STEEL STORAGE

All-Steel Self-Filling Non-Combustible

BUILDINGS

For—

• COTTON SEED
• SOY BEANS
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Designed, Fabricated and Erected

Confer with us on your storage problems

MUSKOGEE IRON WORKS

Muskogee, Oklahoma

MISSION BRAND

COTTON POISONS

Manufactured by

HAYES-SAMMONS CHEMICAL CO. MISSION, TEXAS

Laugh it off

The cute baby on the train was the center of attraction. An elderly man stopped to talk to the child.

"A fine youngster," he said to the young mother. "I hope you will bring him up to be an upright and conscientious man."

"Yes," smiled the fond mother, "but I'm afraid it's going to be a bit difficult. You see . . ."

"Oh, nonsense," said the old gentleman. "As the twig is bent, so is the tree inclined."

"I know it," agreed the mother. "But this twig is bent on being a girl, and we are inclined to let it go at that."

•

The haughty dowager called at the hospital to see her injured chauffeur. "He's a very sick man," said the nurse. "Are you his wife?"

"Certainly not—I'm his mistress," said the good woman.

•

A soldier eats twice as much canned goods as a civilian—80 cans a year as against 40 cans. That includes newlyweds, too.

•

New Boss: "Have you any letters of reference?"

New Salesman: "Sure, read this."

New Boss (reading aloud): "To whom it may concern: Bill Smith worked for us one week, and we were satisfied."

•

"Your honor," said a lawyer, "this man beat his wife over the head with an oak leaf."

"An oak leaf!" the judge snorted. "An oak leaf couldn't hurt anybody."

"Your honor," pursued the lawyer. "It was an oak leaf out of the dining room table."

•

Doting Mother: "And what did Mama's little darling learn at school today?"

Junior: "I learned two punks not to call me Mama's little darling!"

•

"The way our daughter carries on is awful."

"There ought to be a law."

"Yes, a son-in-law."

•

A government crop inspector visited a farm and began asking questions. "Do you people around here ever have trouble with insects getting in your corn?" he inquired.

"Balls o' fire, we sure do!" said the farmer. "But we jes fishes 'em out an' drinks it anyhow."

•

She: "Let's sit this dance out—no one will be the wiser."

He: "Oh, yes; you will!"

•

On Monday mornings, after a good weekend, we feel like a million dollars —that is, with the federal, state, county, city and hidden taxes deducted.

•

A night club is a place where they have what it takes to take what you have.

•

"Is she his best girl?"

"No, just necks best."

Ginners!

Are You Thinking of LINT CLEANING for Your Plant?

Protect your business and your customers by installing a Moss Lint Cleaner. Read below some excerpts from letters on the performance of this new machine!

"We have run a test on cotton ginned on Moss Lint Cleaners for strength, cleanliness, and percentage of waste. The results have proved beneficial to farmers to the extent of $10.00 per bale. All the qualified ginners and mill men who have inspected and watched the new lint cleaners in operation have been unanimous in their opinion that it is not only necessary but essential that the ginners install these machines in order to protect the farmers against loss in grade and staple, and at the same time make the cotton more desirable to the domestic mill trade."

"We buy cotton from most every gin in our territory and have watched the grades and staples from all the gins. We have found the lint cleaner you have installed in your gin has raised the grade and combed out the staple to where it has increased the staple length. We hope you will be able to sell these cleaners to all of the gins in this territory as it is the only thing that will do the job on machine-gathered cotton."

"We have ginned 8,000 bales on our two Moss Dual Lint Cleaners with very little attention. As the season progressed, getting into machine stripped cotton, we found our grades to be netting the farmer on the average of $15.00 per bale. We do not hesitate to recommend the Moss Lint Cleaner to anyone, as the machine did far more than we expected."

Visit or call the office nearest you, and allow us to tell you more about the many new features of this outstanding machine

Write Us For Bulletin No. 1030

GULLETT GIN COMPANY

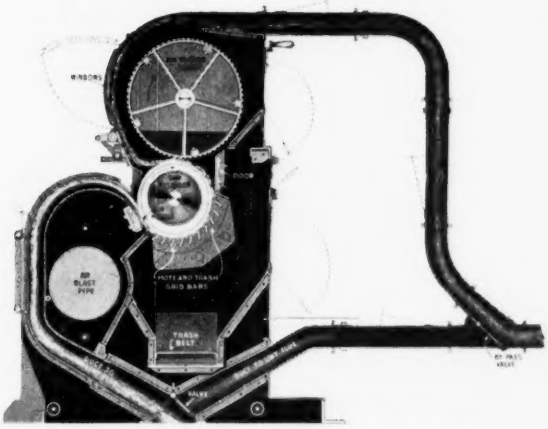
AMITE, LOUISIANA

ATLANTA, GA. **DALLAS, TEXAS** **MEMPHIS, TENN.**

HARDWICKE-ETTER COMPANY

LINT CLEANER

Efficient
Improves Sample
Fits Any Make Gin
No Damage to Fiber
Simple in Operation
Ample Capacity for 90-Saw Gin
Profitable to Ginner & Producer



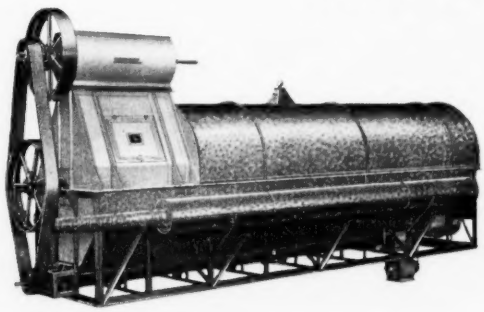
Write for special bulletin

HARDWICKE-ETTER COMPANY

MANUFACTURERS **Sherman, Texas**

The Big Reel Cotton Drier

IT CLEANS AS IT DRIES



This is an Air-Wash Cleaner as well as a Drier. It will not rope or twist the cotton.

The revolving conveyor type Reel in combination with the blast of hot air, permits heat to penetrate every lock of cotton as it is carried through the Drier.

Write for Bulletin No. 30-C

THE MURRAY COMPANY OF TEXAS, INC.

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